

**THE REGION 45 (WISCONSIN) REGIONAL PLAN
FOR
Public Safety's Allocation and Use of Radio Frequencies in the
769-775/799-805 MHz Bands**

Federal Communications Commission
Public Safety and Homeland Security Bureau
Attn: Mr. Derek Poarch, Bureau Chief
445 12th Street, SW
Washington, DC 20554

Date 12/26/07

Dear Mr. Poarch,

As Region 45 Chairperson, I would like to request that the Bureau of Public Safety and Homeland Security accept the 700 MHz plan of Region 45, dated Dec 5, 2007. This plan will fully replace and delete the previous Region 45 plan submitted Feb 27, 2007 via the ECFS system, confirmation number 2007227340395.

The modifications to this plan, created to comply with the Commission's Second Report and Order, have been fully coordinated with all Region 45 adjacent regions, those being Regions 13, 15, 21, 22, and 54. Concurrence letters from these regions are included as part of this submitted plan, found in Section 16.

All references to the former wideband frequency ranges between 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted and have been replaced with references to the new consolidated narrowband band plan, those being 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

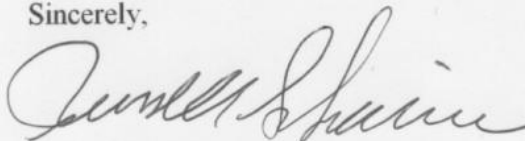
Former data channels in TABLE 3 have been deleted.

Section 8.2 has been added to address "Spectrum Requests for Wideband Operations".

In addition, certifications from all adjacent regions have been included in the body of this plan, in Section 15, that indicate mutual agreement with the Region 45 Dispute Resolution Process.

Thank you for your review of this newly submitted plan.

Sincerely,



Mr. Russell Schreiner, Chairperson
Public Safety Regional Planning Committee
Region 45
Communications Engineering
City of Sheboygan Police Department
828 Center Ave.,
Sheboygan, WI 53081

TABLE OF CONTENTS

1	REGIONAL CHAIRPERSON	5
2	RPC MEMBERSHIP	5
2.1	Member Contact Information	5
2.2	Officers	5
2.3	Subcommittees	5
3	DESCRIPTION OF THE REGION	5
3.1	Definition of the Region and Its Boundaries	5
3.2	Description of existing interoperability contracts, compacts, mutual aid agreements, etc.	9
3.3	Description of the effect of the addition of 700 MHz channels and interoperability requirements will affect existing plans	9
3.4	Overview of Public Safety Entities	9
4	NOTIFICATION PROCESS	9
4.1	Convening of the RPC	9
4.2	Meeting Announcements	9
4.3	Meeting Comments and Summaries	10
4.4	Native American Notification	10
5	REGIONAL PLAN SUMMARY	10
5.1	Guidelines and Procedures for RPC Operation	10
5.2	Procedures for Requesting Channels	10
5.3	Guidelines and Procedures for Protection of Incumbent TV/DTV Stations within the Region or near the Region's border during the DTV transition period	11
5.3.1	90.309 40 dB D/U Tables	11
5.3.2	Engineering Analysis	14
5.3.3	TV/DTV Short-spacing	14
5.3.4	TV/DTV Height Adjustment Factor	14
5.4	Descriptions of the region's applicable interoperability plans and interoperability requirements	15
5.5	Spectrum Utilization agreements with other regions	15
5.6	Description of the pre-coordination allocation method used at the region's borders	15
5.7	An overview of the "700 MHz Public Safety Frequency Coordination Database" and application flowchart	15
6	UTILIZATION OF INTEROPERABILITY CHANNELS	18
6.1	Calling Channels	18
6.2	Tactical Channels	18
6.3	Encryption	19
6.4	Deployable Systems	19
6.5	Trunking on the Interoperability Channels	19
6.6	Standard Operating Procedures on the Trunked I/O Channels for I/O Situations Above Priority Level 4	20
6.7	Standardized Nomenclature	20
6.8	Data Only Use of the I/O Channels	21
6.9	State Interoperability Executive Committee	21

6.10	Minimum Channel Quantity	21
6.11	Direct (Simplex) Mode	22
6.12	Common Channel Access Parameters	22
7	SPECTRUM SET ASIDE FOR INTEROPERABILITY WITHIN THE REGION	23
7.1	Introduction	23
7.2	Tactical Channels	23
7.3	Deployable Systems	24
7.4	Monitoring of Calling Channels	24
8	REGION 45 700 MHZ PLAN AMENDMENTS	24
8.1	Release of Former Reserve Channels for General Use	25
8.2	Air to Ground Channels	26
9	ALLOCATION OF GENERAL USE SPECTRUM	27
9.1	Narrowband Channels	27
9.2	Spectrum Requests for Wideband Operations	28
10	HOW NEEDS WERE ASSIGNED PRIORITIES IN AREAS WHERE NOT ALL ELIGIBLES COULD RECEIVE LICENSES	28
11	HOW ALL THE REGION ELIGIBLES' NEEDS WERE CONSIDERED, AND TO THE EXTENT POSSIBLE, MET	29
12	ADJACENT REGION COORDINATION	29
13	HOW THE PLAN PUT SPECTRUM TO THE BEST POSSIBLE USE	31
14	DESCRIPTION OF THE FUTURE PLANNING PROCEDURES	31
15	CERTIFICATION BY THE CHAIRPERSON THAT ALL MEETINGS WERE OPEN TO THE PUBLIC	32
16	CERTIFICATION BY THE CHAIRPERSON AND ADJACENT REGION LETTERS OF DISPUTE RESOLUTION PROCEDURE CONCURRENCE	33
Appendix A:	BYLAWS OF REGION 45	41
Appendix B:	REGION 45 NOTIFICATION	46
Appendix C:	ATTENDANCE	55
Appendix D:	MEETING ANNOUNCEMENTS	58
Appendix E:	MEETING MINUTES	68
Appendix F:	INTEROPERABILITY CHANNELS, TECH PARAMETERS	81
Appendix G:	INCIDENT COMMAND SYSTEM	85
Appendix H:	MEMORANDUM OF UNDERSTANDING	93
Appendix I:	DISPUTE RESOLUTION PROCESS	96
Appendix J:	LIST OF EXECUTIVE COMMITTEE OFFICERS	101
Appendix K:	REGION 45 COUNTY CHANNEL ALLOTMENT	102
Appendix L:	LIST OF ACRONYMS	123
Appendix M:	ADJACENT REGION ORIGINAL PLAN CONCURRENCE	124
Appendix N:	ADJACENT REGION SECOND R&O CONCURRENCE	130
Appendix O:	REGION 45 700 MHZ PLAN AMENDMENTS	135
Appendix P:	ADJACENT REGION GEN USE CHANNEL CONCURRENCE	137

**THE REGION 45 (Wisconsin) REGIONAL PLAN
FOR
Public Safety's Allocation and Use of Radio Frequencies in the
769-775/799-805 MHz Bands**

1 REGIONAL CHAIRPERSON

The current elected Regional Chairperson is Russell Schriener, Communications Engineer for the City of Sheboygan (WI) Police Department, 828 Center Ave., Sheboygan, WI 53081. Contact number is: (920) 459 3351. Email is: rschreiner@ci.sheboygan.wi.us

2 RPC MEMBERSHIP

Membership classes are defined in Article II of the Bylaws (**Appendix A**). In general each eligible agency can have as many representatives as they want; only one representative can vote, however. The Secretary shall maintain a list of members who are eligible to vote. No member is allowed to vote on his/her own agency's application.

2.1 Member Contact Information

Appendix B contains a roster of all RPC members with their agency affiliations, contact information, and voting status.

2.2 Officers

Article III of the Bylaws defines the offices of the Regional Committee. In brief they are a) Chairperson, b) Vice-Chairperson, c) Secretary, d) Treasurer, and e) State Frequency Specialist. These officers form the executive committee and the plan review committee.

2.3 Subcommittees

Article IV of the Bylaws establishes seven subcommittees of the RPC to develop and implement this plan. They are: 1) Executive; 2) Interoperability; 3) Membership; 4) Technical; 5) Implementation; 6) 4.9 GHz and 7) Financial.

3 DESCRIPTION OF THE REGION

3.1 Definition of the Region and Its Boundaries

Region 45, the Wisconsin Region, is comprised of the entire State of Wisconsin with the exception of the following counties, which belong to Region 54: Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha.

Region 45 contains sixty-one counties within the state of Wisconsin. The region has a population of 2,766,703 (2002 Census) and a land area of 48,331 square miles.

Table 1 lists each county with their associated statistics. **Figure 1** shows a map of the county and regional boundaries.

REGION 45 COUNTY DEMOGRAPHICS

	Name	Population (2002 Census)	Land Area (mi ²)	Population Density (1/ mi ²)
1	Adams County	20515	648	28.8
2	Ashland County	16827	1044	16.2
3	Barron County	45436	863	52.1
4	Bayfield County	15161	1476	10.2
5	Brown County	232185	529	429.0
6	Buffalo County	13726	684	20.2
7	Burnett County	15999	822	19.1
8	Calumet County	42365	320	127.0
9	Chippewa County	56076	1010	54.6
10	Clark County	33826	1216	27.6
11	Columbia County	53374	774	67.8
12	Crawford County	16897	573	30.1
13	Door County	28101	483	57.9
14	Douglas County	43738	1309	33.1
15	Dunn County	40695	853	46.8
16	Eau Claire County	94219	638	146.1
17	Florence County	5032	488	10.4
18	Fond Du Lac County	97809	723	134.6
19	Forest County	10011	1014	9.9
20	Grant County	49320	1148	43.2
21	Green County	34081	584	57.6
22	Green Lake County	19062	354	53.9
23	Iowa County	23119	763	29.9
24	Iron County	6828	757	9.1
25	Jackson County	19400	987	19.3
26	Juneau County	24832	768	31.7
27	Kewaunee County	20422	343	58.9
28	La Crosse County	108148	453	236.6
29	Lafayette County	16243	634	25.5
30	Langlade County	20717	873	23.8
31	Lincoln County	29871	883	33.6
32	Manitowoc County	82481	592	140.1

REGION 45 COUNTY DEMOGRAPHICS, con't

	Name	Population (2002 Census)	Land Area (mi²)	Population Density (1/ mi²)
33	Marathon County	126728	1545	81.4
34	Marinette County	43494	1402	30.9
35	Marquette County	14694	455	34.8
36	Menominee County	4679	358	12.7
37	Monroe County	41609	901	45.4
38	Oconto County	36629	998	35.7
39	Oneida County	36860	1124	32.7
40	Outagamie County	166148	640	251.4
41	Pepin County	7291	232	31.1
42	Pierce County	37422	576	63.8
43	Polk County	42698	917	45.0
44	Portage County	67321	806	83.3
45	Price County	15402	1253	12.6
46	Richland County	18026	586	30.6
47	Rusk County	15311	913	16.8
48	St. Croix County	68122	722	87.5
49	Sauk County	55632	838	65.9
50	Sawyer County	16563	1256	12.9
51	Shawano County	40928	893	45.6
52	Sheboygan County	112480	514	219.3
53	Taylor County	19650	975	20.2
54	Trempealeau County	27215	734	36.8
55	Vernon County	28346	795	35.3
56	Vilas County	21636	874	24.1
57	Washburn County	16448	810	19.8
58	Waupaca County	52321	751	68.9
59	Waushara County	23299	626	37.0
60	Winnebago County	158401	439	357.4
61	Wood County	75174	793	95.3
	TOTAL	2,766,703	48,331	57.2

TABLE 1

REGION 45 COUNTIES



FIGURE 1

3.2 Description of existing interoperability contracts, compacts, mutual aid agreements, etc.

There are many agreements among the agencies within the county areas regarding mutual aid. For most cases, the agreements that exist consist of an order of who will be requested for assistance and in what order the requests will be made. Again, in most cases, the agreements state that the emergency communication centers will designate the radio channel, which will be used to communicate between agencies during the incident.

3.3 Description of the effect of the addition of 700 MHz channels and interoperability requirements will affect existing plans

The State government of Wisconsin is administering the Interoperability channels. To assist with this task, Wisconsin has formed an SIEC (Statewide Interoperability Executive Committee).

3.4 Overview of Public Safety Entities

The public safety entities that have jurisdiction within Region 45 span the gamut of State, County and Local police, fire, emergency medical and other agencies as defined by the FCC's public safety eligibles list in Section 90.20(a). Insofar as planning for the allocation and use of the 700 MHz frequencies is concerned, the lead agencies have been the Bureau of Communications / Wisconsin State Patrol, Brown County Public Safety Commission, Wisconsin Emergency Management, Marathon County Sheriff Department, Wisconsin Department of Public Health, plus many other county and local governmental agencies.

4 NOTIFICATION PROCESS

4.1 Convening of the RPC

Mr. Carl Guse, chairperson of the Region 45, 800 MHz Planning Committee, convened the initial meeting of the Regional Planning Committee. The meeting was announced by FCC public notice and email listings with 60 days prior notice, and was held at the Wisconsin State Patrol District 4 headquarters in Wausau, WI. The meeting was convened on May 1, 2003. See **Appendix B** for a list of agencies contacted.

4.2 Meeting Announcements

Since then meeting announcements have been published in a variety of media including the FCC's web site and Public Notices, the Regional Planning Committee's master email distribution list, APCO and WI NENA websites, and inter-agency notices. **Appendix D** contains copies of the meeting announcements.

4.3 Meeting Comments and Summaries

As work progressed, members exchanged comments among subcommittees primarily through direct e-mails. When ready for review by a broader portion of the membership, drafts of documents were distributed on the Regional Planning Committee's master email distribution list and posted on CAPRAD, with notifications of the posting on the WI APCO and WI NENA websites. Appendix E contains the minutes of each general membership meeting.

4.4 Native American Notification

To address the notification of Native American tribes, the Region 45 Executive Committee contacted various tribal entities. See **Appendix C**, attendance listings, for further details. In particular, input was gained from Menominee Tribal Police and Ho-Chunk Nation Security. Region 45 meetings have been held at Oneida and Ho-Chunk Tribe facilities in the past. A letter of introduction and overview of the Region 45 RPC activities was submitted to the Tribes. Contact has been maintained with Great Lakes Inter Tribal Council as a conduit for distribution to the tribes listed below:

- Bad River Band of Lake Superior Chippewa Indians
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians
- Lac du Flambeau Band of Lake Superior Chippewa
- Red Cliff Band of Lake Superior Chippewa
- Sokaogon Chippewa Tribe (Mole Lake)
- St. Croix Chippewa Tribe
- Forest County Potawatomi Community
- Oneida Nation
- Ho-Chunk Nation
- Stockbridge-Munsee Indians of Wisconsin
- Menominee Tribe of Wisconsin
- Lac Vieux Desert Tribe of Michigan

5 REGIONAL PLAN SUMMARY

5.1 Guidelines and Procedures for RPC Operation

A copy of the Committee's Bylaws establishing the guidelines and procedures for operation of the RPC is contained in **Appendix A**.

5.2 Procedures for Requesting Channels

The Regional Planning Committee must approve all finalized applications. No application may be changed or revised in any way by any person prior to final submittal to the FCC. All

applications will be submitted to the Region 45 RPC electronically via CAPRAD for review by the Review Committee. See Section 5.8, **Table 3** and **Figure 2**, for further detail. Public safety agencies applying for channel assignments may file applications upon approval of the Region 45 RPC 700 MHz plan.

5.3 Guidelines and Procedures for Protection of Incumbent TV/DTV Stations within the Region or near the Region's border during the DTV transition period

Region 45 - Wisconsin TV Stations

County	Channel	Call Sign	Service	Location	Latitude NAD83	Longitude NAD83
Chippewa County	68	W68DP	TX – low power	Chippewa Falls	44°55'43"N	91°32'31"W
Fond du Lac County	62	DW62BN	TX – low power	Fond du Lac	43°50'22"N	88°22'6"W
La Crosse County	67	W67CH	TX – low power	La Crosse	43°45'25"N	91°17'40"W
Lafayette County	67	W67AC	TX – low power	Darlington	42°40'47"N	90°7'37"W
Lafayette County	69	W69AB	TX – low power	Darlington	42°40'47"N	90°7'37"W
Outagamie County	67	DW67BS	TX – low power	Appleton	44°15'45"N	88°21'55"W
Portage County	62	W62DA	TX – low power	Whiting	44°32'36"N	89°40'7"W
Sheboygan County	66	DW66AX	TX – low power	Sheboygan	43°39'30"N	88°0'30"W
Portage County	66	W66DC	TX – low power	Waupaca	44°25'3"N	88°55'3"W
Fond du Lac County	68	WMMF*	TV - television	Fond du Lac	43°50'22"N	88°22'6"W

* NOTE: As of Oct 10, 2004, WMMF is now in Dodge County, Region 54.

Table 2

During the DTV Transition period, the Region 45 RPC will consider all co-channel and adjacent channel TV and DTV stations within a 160-mile radius of an application. For a public safety system at 500 watts ERP and 500 ft HAAT, co-channel TV stations can block a 120-mile radius and adjacent channel TV/DTV stations can block a 90-mile radius.

Since base station transmitters are located only on channels 63 and 64, LMR mobile only TV/DTV protection spacing on channels 68 and 69 may be shorter than LMR base TV/DTV protection on channels 63 & 64.

Public safety applicants can select one of three ways to meet the TV/DTV protection requirements: (1) utilize the geographic separation specified in the 40 dB Tables of 90.309; (2) submit an engineering study to justify other separations which the Commission approves; or (3) obtain concurrence from the applicable TV/DTV station(s).

5.3.1 90.309 40 dB D/U Tables

The FCC adopted a 40 dB desired (TV/DTV) to undesired (LMR) signal ratio for co-channel operations and a 0 dB desired/undesired (D/U) signal ratio for adjacent channel operations. The D/U ratio is used to determine the geographic separation needed between public safety base stations and the Grade B service contours of co-channel and adjacent channel TV/DTV stations. The D/U signal ratio is used to determine the level of land mobile signals that can be permitted at protected fringe area TV receiver locations without degrading the TV picture to less than a defined picture quality. In other words, the D/U signal ratio indicates what relative levels of TV and land mobile signals can be tolerated without causing excessive interference to TV reception at the fringe of the TV service area.

Desired and undesired contours are not quite the same thing. Desired analog TV contours are defined as F(50,50), meaning coverage is 50% of the places and 50% of the time. Undesired land mobile or interference contours are defined as F(50,10). For Digital TV, the desired contours are defined as F(50,90), while the undesired land mobile contour are still F(50,10).

Land mobile and analog TV services have successfully shared the 470-512 MHz band (TV Channels 14-20) within a 50 mile radius of eleven major cities since the early 1970's based upon providing a signal ratio of at least 50 dB between the desired TV signal and undesired co-channel land mobile signal (D/U signal ratio) at a hypothetical 88.5 km (55 mi.) Grade B service contour and an adjacent channel D/U signal ratio of 0 dB at the same hypothetical Grade B service contour. These separation distances also protected the land mobile systems from interference from the TV stations. In 1985, recognizing that 50 dB D/U was too conservative, the FCC proposed to expand land mobile/TV sharing to other TV channels and proposed that the geographic separation requirements for co-channel operations be based on a D/U signal ratio of 40 dB rather than 50 dB. That proceeding was put on hold pending completion of the DTV proceeding, which has now been completed. In the 470-512 MHz band, the FCC also relied on minimum separation distances based on the various heights and powers of the land mobile stations (HAAT/ERP separation tables) to prevent harmful interference.

Since this simple, yet conservative, method was successful, the FCC decided to use this same method, the 90.309 HAAT/ERP Separation Tables, to administer LMR to TV/DTV receiver protection criteria for the services in the 700 MHz band.

Co-channel land mobile base station transmitters are limited to a maximum signal strength at the hypothetical TV Grade B contour 40 dB D/U below desired 64 dBu F(50,50) analog TV signal level, or 24 dBu F(50,10). The FCC adopted a 0 dB D/U signal ratio for adjacent channel operations. Adjacent channel land mobile transmitters will be limited to a maximum signal of 64 dBu F(50,10) which is 0 dB D/U below the TV Grade B signal of 64 dBu F(50,50) at the TV station Grade B contour of 88.5 km (55 miles). A typical TV receiver's adjacent channel rejection is at least 10-20 dB greater than this level which will further safeguards TV receivers from land mobile interference.

The equivalent ratios for a DTV station's 41 dB F(50,90) desired field strength contour are land mobile 17 dB F(50,10) contour for co-channel and land mobile - 23 dB F(50,10) contour for adjacent channel. The Tables to protect TV/DTV stations are found in Section 90.309 of the Commission's rules. These existing Tables cover co-channel protection based on a 40 dB D/U ratio using the separation methods described in Section 73.611 of the Commission's rules for base, control, and mobile stations, and for adjacent channel stations for base stations based on a 0 dB D/U ratio.

However, the original considerations in 470-512 MHz band under Section 90.309 were different in that mobiles were limited in their roaming distance from the base station (less than 30 miles) and mobiles were on the same TV channel as the base station.

Control and mobile stations (including portables) are limited in height and power. Mobiles and control stations shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection for TV and 17 dB for DTV) in § 90.309.

Control stations and mobiles/portables shall keep a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV and -23 dB for DTV). This means that control and mobile stations shall keep a minimum distance of 96.5 kilometers (60 miles) from all adjacent channel TV/DTV stations. Since operators of mobiles and portables are able to move and communicate with each other, licensees or coordinators must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations, and advise the mobile operators of these areas and their restrictions.

5.3.2 Engineering Analysis

Limiting TV/land mobile separation to distances specified in the 40 dB HAAT/ERP Separation Tables found in 90.309 may prevent public safety entities from fully utilizing this spectrum until after the DTV transition period ends. Public safety applicants will be allowed to submit engineering studies showing how they propose to meet the appropriate D/U signal ratio at the existing TV station's authorized or applied for Grade B service contour or equivalent contour for DTV stations instead of the hypothetical contour at 88.5 km.

This would permit public safety applicants to take into account intervening terrain and engineering techniques such as directional and down-tilt antennas in determining the necessary separation to provide the required protection. Public safety applicants who use the engineering techniques must consider the actual TV/DTV parameters and not base their study on the 88.5 km hypothetical or equivalent Grade B contour. If land mobile interference contour does not overlap the TV Grade B contour (or DTV equivalent), then engineering analysis may be submitted to the FCC with the application.

This method is most useful with lower power TV stations whose Grade B contours are much smaller than the hypothetical 55 mile (88.5 km) Grade B contour or have directional patterns.

Note that the 200 ft AGL limitation on 700 MHz control stations is much higher than the 100 ft AGL limitation used at UHF. Limiting control station antenna height and/or ERP may greatly reduce land mobile to TV contour spacing. Also, note that analysis for TV/DTV receivers uses 30 ft (10 m) antenna height whereas, analysis for land mobile subscribers uses about a 6 ft (2m) antenna height.

5.3.3 TV/DTV Short-spacing

Public safety applicants will also be allowed to "short-space" even closer if they get the written approval of the TV stations they are required to protect. Public safety applicants need to determine the station's intended market area vs. its hypothetical Grade B contour area. Alternately, the TV/DTV station may be short-spaced against another TV/DTV station, limiting their area of operation, but not affecting LMR operations.

Instead of each agency negotiating with a TV/DTV station individually, they may want to combine into a single group or committee and negotiate together.

5.3.4 TV/DTV Height Adjustment Factor

In order to protect certain TV/DTV stations which have extremely large contours due to unusual height situations, the FCC incorporated an additional height adjustment factor which must be used by all public safety base, control and mobile stations to protect these few TV/DTV stations and afford the land mobile stations the necessary protection from the TV/DTV stations. The

equation necessary to calculate the additional distance from the hypothetical or equivalent Grade B contour is found in the rules section 90.545(c)(2)(iii).

5.4 Descriptions of the region’s applicable interoperability plans and interoperability requirements

The I/O channels will be used in accordance with the NCC’s recommendations, with the exception that Region 45 will not allow encryption on any I/O channels.

5.5 Spectrum Utilization agreements with other regions

The Region 45 RPC is working with its adjoining regions: 13, 15, 21, 22 and 54 regarding the shared utilization of spectrum.

5.6 Description of the pre-coordination allocation method used at the region’s borders

The Region 45 RPC is working with its adjoining regions: 13, 15, 21, 22 and 54 regarding the pre-coordination allocation of channels along the mutual borders.

See section 11 for further description.

5.7 An overview of the “700 MHz Public Safety Frequency Coordination Database” and application flowchart

Table 3 provides a summary of the Region 45 database upon which subsequent frequency coordination will be founded. **Figure 2** depicts, in graphical form, how the coordination process will flow.

Region 45 Planning Summary

Total Regional Population: 2,766,703

Areas with at least one channel allotted: 61

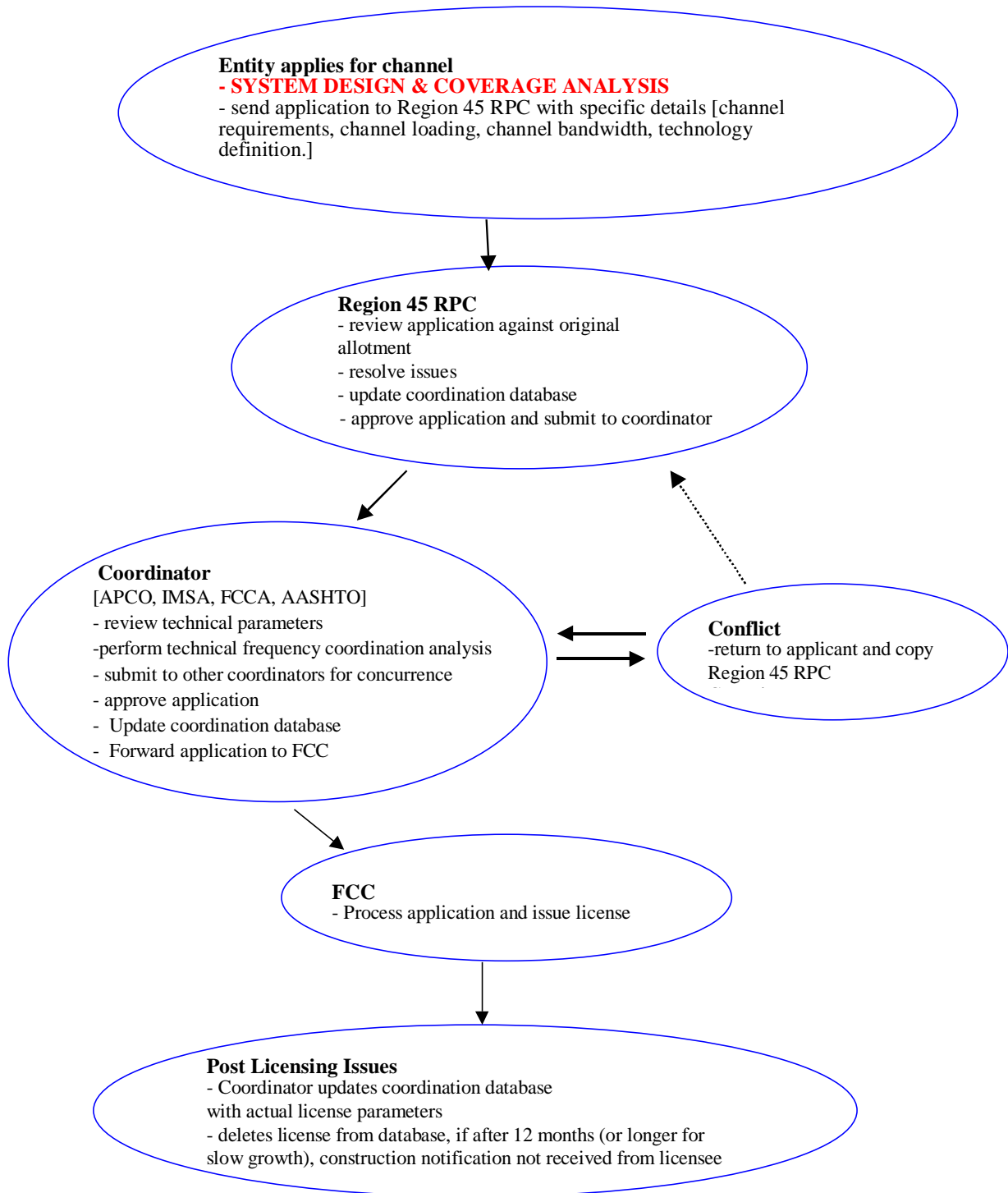
Areas with no channels allotted: 0

Areas affected by Border Zone: None

Spectrum Allotment Summary

Type	Width (kHz)	Channels Allotted	Co-Channel Usage	Channels Remaining
General Use	Voice 25	154	223	0
	Voice 12.5	0	0	308
	Voice 6.25	0	0	616
Interoperability	Voice 12.5	0	0	28
	Voice 6.25	0	0	56
Secondary Trunking	Voice 12.5	0	0	8
	Voice 6.25	0	0	16
I/O Nationwide Call	Voice 12.5	0	0	2
	Voice 6.25	0	0	4
I/O Low Speed Data	Voice 12.5	0	0	2
	Voice 6.25	0	0	4
Low Power	Voice 25	0	0	6
	Voice 12.5	0	0	12
	Voice 6.25	0	0	24

Table 3**Data channels from this list are deleted**

Region 45 RPC Coordination Flow Chart**Figure 2**

6 UTILIZATION OF INTEROPERABILITY CHANNELS

The narrowband voice & data interoperability channels (sixty-four at 6.25 kHz bandwidth) are defined on a nationwide basis. **Appendix F** shows the designation of these channels as defined by the 700 MHz National Coordination Committee (NCC). Since they are nationwide channels, each channel must have the same usage within each region and across regional borders. They have been sub-divided into different service categories.

The ANSI/TIA 102 Series standards (Project 25) are the Digital Interoperability Standard for the conventional-only mode of operations on narrowband voice and data interoperability channels.

There are 2 Calling channel sets and 30 Tactical channel sets. Channel sets are comprised of two 6.25 kHz channels each.

The Tactical channel sets are subdivided into the following categories:

- 4 for Emergency Medical Services,
- 4 for Fire Services,
- 4 for Law Enforcement Services,

- 2 for Mobile Repeater operation,
- 2 for Other Public Services, and
- 12 for General Services
- 2 for Data Services

6.1 Calling Channels

Because the 700 MHz band will be initially encumbered by broadcast television, two of the interoperability channels sets are reserved as "Calling Channels". The State will define when and where the two calling channels are to be used. These calling channels, which appear in the Table of Interoperability Channels (**Appendix F**) as "7CALL50" and "7CALL70B" must be monitored, as appropriate, by licensees who employ interoperability infrastructure in the associated channel group. When calling channels are integrated into infrastructure, their coverage must at least match the coverage of the other interoperability channels in the system. In addition to the usual calling channel functions, the calling channels may be used to notify users when a priority is declared on one or more of the tactical interoperability channels.

6.2 Tactical Channels

All Interoperability channels, except as described below, shall be used for conventional-only operation. Normally, users will 'call' a dispatch center on one of the "Calling Channels" and be assigned an available tactical channel. Deployable narrowband operations (voice, data, trunking) shall be afforded access to the same pool of channels used for similar fixed infrastructure operations. In the event of conflict between multiple activities, prioritized use shall occur.

6.3 Encryption

Use of encryption is prohibited on all Interoperability channels, both Calling and Tactical.

6.4 Deployable Systems

General Public Safety Services Channels labeled 7TAC51 through 7TAC56, 7TAC71 through 7TAC76, or both, shall be made available for "deployable" equipment used during disasters and other emergency events that place a heavy, unplanned burden upon in-place radio systems. States shall consider the need for both "deployable trunked" and "deployable conventional" systems and make those channels available to all entities in their State/region.

6.5 Trunking on the Interoperability Channels

Trunking the Interoperability channels on a secondary basis shall be limited to operation on eight specific 12.5 kHz channel sets, divided into two subsets of four 12.5 kHz channels. One subset is defined by 7TAC51 through 7TAC54 and the other by 7TAC71 through 7TAC74.

Any licensee implementing base station operation in a trunking mode on Interoperability Channels shall provide and maintain on a continuous (24 hr x 7 day) basis at its primary dispatch facility the capability to easily remove one or more of these interoperability channels, up to the maximum number of such trunking channels implemented, from trunking operation when a conventional access priority that is equal to or higher than their current priority is implemented.

While it may be desirable for Region 45 to permit trunked radio systems to incorporate one or more of the Interoperability channels into a single trunking system as a means of enhancing the use of the system for interoperability purposes (and by implication allow those channels to be routinely used for normal day-to-day communications), care must also be given to ensure that those channels do not become such an integral part of the trunked system operation that it becomes politically and technically impossible to extract them from the trunked system in the event of an emergency event having higher priority. For this reason, Region 45 will limit the number of Interoperability channels that may be integrated into any single trunked system to the following amounts:

For systems having 10 or fewer "general use" voice paths allocated, one (1) trunked Interoperability Channel set is permitted. For systems having more than 10 "general use" voice paths allocated, two (2) trunked Interoperability Channel sets are permitted.

Region 45 may consider allotting additional Interoperability Channel set(s) for trunked systems having more than 20 "general use" voice paths allocated upon a showing of need and upon a determination that assignment of the Interoperability Channel set(s) will not adversely impact availability of those channels to other trunked and/or conventional radio systems in the area (e.g. a single consolidated trunked system servicing all public safety agencies in an area might satisfy

this criterion). The maximum number of Interoperability channel sets for trunked systems permitted for use by an individual licensee is four.

6.6 Standard Operating Procedures on the Trunked I/O Channels For I/O Situations Above Priority Level 4

The safety and security of life and property determines appropriate interoperable priorities of access and/or reverting from secondary trunked to conventional operation. In the event secondary trunked access conflicts with conventional access for the same priority, conventional access shall take precedence. Access priority for “mission critical” communications is defined as follows:

1. Disaster and extreme emergency operations for mutual aid and interagency communications;
2. Emergency or urgent operation involving imminent danger to life or property;
3. Special event control, generally of a preplanned nature (including Task Force operations);
4. Single agency secondary communications. [Priority 4 is the default priority when no higher priority has been declared.]

For those systems employing I/O channels in the trunked mode, the State must set up interoperability talk groups and priority levels for those talkgroups so that it is easy for dispatch to determine whether the trunked I/O conversation in progress has priority over the requested conventional I/O use. A wide-area I/O conversation will have priority over a local I/O conversation under normal circumstances.

6.7 Standardized Nomenclature

Region 45 will use the national standard nomenclature such that all 700 MHz public safety subscriber equipment using an alphanumeric display only be permitted to show the recommended label from the Table in **Appendix F** when the radio is programmed to operate on the associated 700 MHz channel set. The Table shows the recommended label for equipment operating in the mobile relay (repeater) mode. When operating in direct (simplex) mode, the letter “D” shall be appended to the end of the label.

6.8 Data Only Use of the I/O Channels

Narrowband data-only interoperability operation on the Interoperability channels on a secondary basis shall be limited to two specific 12.5 kHz channel sets. One set is defined by 7DATA69 and the other by 7DATA89.

6.9 State Interoperability Executive Committee

This plan includes, but is not limited to, interoperability operations on the 700 MHz interoperability channels. The SIEC will include an equal number of representatives each providing regional representation from state, county, and local governments, with additional representation from special districts and federal agencies, as appropriate. Such committee will represent all disciplines, in which case emergency medical, fire, forestry, general government, law enforcement, and transportation agencies from each level of government shall be represented equally.

Region 45 will use the Incident Command System (ICS) / National Incident Management System (NIMS) as a guideline in developing the regional interoperability plans. (See Appendix G) In the event that the State will not accept this responsibility, the RPC will assume responsibility for 700 MHz channels.

The State may hold licenses on interoperability channels for all infrastructure and subscriber units within the region. In the event that the State declines to do so, it may delegate this responsibility to the RPC.

The State will have oversight of the administration and technical parameters of the infrastructure for the interoperability channels. Recommended templates for a Memorandum of Understanding for Operating the 700 MHz Interoperability Channels and a Sharing Agreement are attached in **Appendix H**. The MOU shall be typed on appropriate committee letterhead and the Sharing Agreement on agency letterhead.

6.10 Minimum Channel Quantity

The minimum channel quantity for Calling and Tactical channel sets requires 8 I/O channel slots in each subscriber unit. Including direct (simplex) mode on these channel sets, up to 16 slots in each radio will be programmed for I/O purposes. Backbone issues are deferred to the SIECs. Subscriber units, which routinely roam through more than one jurisdiction up to nationwide travel will require more than the minimum channel quantity.

The Calling channel sets (7CALL50 and & 7CALL70) shall be implemented in all voice subscriber units in repeat-mode and direct (simplex) mode. Direct mode is permitted in the absence of repeat operation or upon prior dispatch center coordination. If the local Calling channel set is not known, 7CALL50 shall be attempted first, then 7CALL70. Attempts shall be made on the repeater mode first, then on the direct (simplex) mode.

A minimum set of “Tactical” channels shall be implemented in every voice subscriber unit in the direct (simplex) mode. Specific channel sets are shown below (the SIEC has the option to exceed this minimum requirement.)

7TAC55 & 7TAC75 channel sets
7MOB59 & 7MOB79 channel sets
7GTAC57 & 7GTAC77 channel sets

NOTE: Selection of the above TAC channels are based on the revised Table of Interoperability Channels. Channel labels are a compromise between the 4th R&O and IO-0062D-20010118.

Voice subscriber units subject to multi-jurisdictional or nationwide roaming should have all I/O voice channels, including direct (simplex) mode, programmed for use.

6.11 Direct (Simplex) Mode

In direct (simplex) mode, transmitting and receiving on the output (transmit) side of the repeater pair for subscriber unit-to-subscriber unit communications at the scene does not congest the repeater station with unnecessary traffic. However, should someone need the repeater to communicate with the party who is in direct mode, the party would hear the repeated message, switch back to the repeater channel, and join the communications. Therefore, operating in direct (simplex) mode shall only be permitted on the repeater output side of the voice I/O channels sets.

6.12 Common Channel Access Parameters

Common channel access parameters will provide uniform I/O communications regardless of jurisdiction, system, manufacturer, etc. Thus, the Calling and Tactical channels (all of them) will include the national standard common Network Access Code (NAC). The secondary, trunked I/O channels would be excluded in the trunked mode. However, when reverted to

conventional I/O, the common NAC would then apply. This national requirement applies to base stations and subscriber units. It also applies to fixed or temporary operations; and to tactical, vice, or other mutual aid conventional I/O use.

Common channel access parameters for all voice I/O shall utilize the default values (ANSI/TIA/EIA-102, BAAC-200, approved April 25, 2000) provided in every radio regardless of manufacturer. Any common channel access parameters not provided shall be programmed accordingly. These parameters include the following:

P25 Network Access Code - \$293 (default value)
P25 Manufacturers ID - \$00 (default value)
P25 Designation ID - \$FFFFFF (designates everyone)
P25 Talkgroup ID - \$0001 (default value)

P25 Message Indicator - \$000000...0, out to 24 zeros (unencrypted)

P25 Key ID - \$0000 (default value)

P25 Algorithm ID - \$80 (unencrypted)

Any deviation from §293 will not be permitted unless the SIEC can demonstrate in a Plan amendment through the FCC-approved process that the intent of §293 will be preserved on ALL conventional voice I/O channels – transmit and receive.

7 ADDITIONAL SPECTRUM SET ASIDE FOR INTEROPERABILITY WITHIN THE REGION

7.1 Introduction

The ability for agencies to effectively respond to mutual aid requests directly depends on their ability to communicate with each other. Wisconsin is subject to many natural disasters and contains regions and facilities, which may be susceptible to a man-made disaster or weapons of mass destruction attack. Mutual aid should be encouraged among agencies. This Plan seeks to facilitate the communications necessary for effective mutual aid.

The State of Wisconsin will administer the 700 MHz interoperability channels via the State Interoperability Executive Committee (SIEC) under National Coordination Committee's (NCC) guidelines. Members of the Region 45 700 MHz Regional Planning Committee will participate in the Wisconsin State Interoperability Executive Committee (SIEC) and they will represent Region 45. If at any time the State SIEC is unable to function in the role of administering the interoperability channels in the 700 MHz band, then this committee will assume this role and notify the FCC in writing of the change in administrative duties. See the NCC Implementation Subcommittees Table of Interoperability Channels, **Appendix F**.

7.2 Tactical Channels

Due to the availability of 700 MHz public safety channels in Wisconsin, Region 45 will not set aside additional channels for interoperability use within the region. It is anticipated the sixty-four FCC designated interoperability channels will be sufficient to provide interoperability (voice and data) within Region 45.

All mobile and portable units operating under this Plan and utilizing 700 MHz channels must be programmed with the minimum number of channels called for in NCC guidelines. The channel display in these radios will be in accordance with the NCC guidelines that have common alphanumeric nomenclature to avoid any misinterpretation of use within Region 45.

7.3 Deployable Systems

Region 45 supports the use of deployable systems, both conventional and trunked. Deployable systems are prepackaged systems that can be deployed by ground or air to an incident to provide additional coverage and capacity on designated 700 MHz interoperability channels and/or agency specific General Use Channels. This will minimize the expense of installing extensive fixed infrastructure in areas while still providing mission critical functionalities as the Region recognizes the difficulty of providing complete coverage in all areas due to financial, demographic and geographical constraints.

Agencies may have conventional deployable systems capable of being tuned to any of the FCC designated/NCC recommended interoperability tactical channels. Those agencies that are part of a multi-agency trunked system and commonly provide mutual aid to each other are encouraged to have trunked deployable systems that operate on the tactical channels designated by the FCC for this use. The SIEC will develop the operational details for deploying these systems.

7.4 Monitoring of Calling Channels

700 MHz licensees will be responsible for monitoring interoperable calling channels. The SIEC will develop operational guidelines for this function. **Appendix E** will include interoperability guidelines.

8 REGION 45 700 MHZ PLAN AMENDMENTS

This section is focused on instances when actions taken by the FCC or the 700 MHz Regional Planning Committee itself necessitate a change in the regional plan. 700 MHz Plan changes are required to be submitted to the FCC under Docket 02-378.

700 MHz PLAN MODIFICATION REQUIRED FOR ALL REGIONS

October 24, 2014 FCC Report and Order 14-172

Reserve Channel Reclassification-

The language below is from the FCC's Report and Order indicated above that outlines the changes 700 MHz RPC's need to make to their existing plans with the former Reserve channels being reallocated to General Use.

Discussion (FCC 14-172)

Paragraph 39. We conclude that the 700 MHz Reserve Channels should be added to the General Use pool and made available for multiple uses under RPC administration. The demand for 700 MHz narrowband spectrum has significantly increased in recent years, particularly in large urban areas. Some 700 MHz licensees have channel requirements that have surpassed what was envisioned in the original channel allotment process. Moreover, in Los Angeles, Washington DC, and other major metropolitan areas, the Reserve Channels offer much-needed capacity for relocating T-Band public safety licensees as required by the Public Safety Spectrum Act.

Paragraph 40. To accommodate these spectrum demands, we adopt the following overall approach. Rather than dedicating the Reserve Channels exclusively for use with deployable systems, **we require the RPCs to administer the Reserve Channels subject to the following.**

In the non T-Band areas, up to eight 12.5 kilohertz channels may be dedicated for temporary deployable trunked use and the rest for General Use, including low-power vehicular repeaters. In the T-Band markets, all twenty-four Reserve Channels will be available for General Use with priority given to relocating T-Band incumbents that commit to return an equal amount of T-Band channels.

The RPCs shall submit channel plans consistent with this Report and Order within six months from publication in the Federal Register.¹¹² We encourage T-Band licensees transitioning to the former Reserve Channels to consider using spectrally efficient 6.25 kHz technology given the limited number (24) of available former Reserve Channels.

Regional Planning Committees, per the FCC language above, have a number of options to consider when repurposing the former Reserve Channels within their regions. Those regions that include T-Band areas must prioritize the assignment of all 24 Reserve Channels to those T-Band licensees. The FCC has recommended that up to eight (8) Former Reserve Channels be designated for nationwide deployable use and the National Public Safety Telecommunications Council (NPSTC) and the National Regional Planning Council (NRPC) have submitted to the FCC their recommendations for six (6) Former Reserve Channels that should be considered for nationwide deployable use, in bold in the Reserve Channel List below:

8.1 Release of Former Reserve Channels for General Use

Region 45 700 MHz Regional Planning Committee submits this 700 MHz plan modification to the Commission in accordance with the Report and Order (14-172) and the requirements assigned to each regional planning committee

Region 45 has no T-Band licensees allocated in the region.

Region 45 will modify its existing 700 MHz plan utilizing the following channel plan for the former Reserve Channels. Region 45 supports the FCC's philosophy to encourage T-Band licensees transitioning to the former Reserve Channels to use spectrally efficient 6.25 kHz technology given the limited number (24) of available former Reserve Channels.

Region 45 will employ the same methodology for coordination of these frequencies as with the existing spectrum allotment. Region 45 will utilize the same intra-region and inter-region coordination practices with this spectrum allotment as well.

As per FCC PS Docket Nos. 13-87 and WT Docket 02-378, a five year priority access period for T-Band incumbents will expire five years from the date of this Public Notice, i.e., January 9,

2020, unless modified by the Commission. At which time Region 45 will utilize any of the unlicensed 24 Reserve Channels in the following manner:

Region 45 will allocate the following channels on a case by case basis:

37-38, 61-62, 117-118, 141-142, 883-884, and 939-940

To be utilized as Nationwide Deployable Trunked Channels consistent with the NPSTC/NRPC recommendation to the FCC utilizing the recommended system and unit identifiers from NPSTC/NRPC.

Region 45 will allocate the following channels on a case by case basis:

77-78, 157-158, 859-860, and 923-924

to be utilized either as 2 watt vehicular repeater frequencies (MO3), to be coordinated for use with 800 MHz systems in the region due to the needed separation between these frequencies, and those utilized by public safety in the 800 MHz band.

We modify the Region 45 700 MHz plan to utilize the remaining channels as “floating allotments” to supplement the existing General Use allotments in each region: 197-198, 221-222, 237-238, 277-278, 301-302, 317-318, 643-644, 683-684, 699-700, 723-724, 763-764, 779-780, 803-804, 843-844. Allowing these remaining channels to supplement the existing General Use allotments utilized within the region will promote maximum flexibility of the use of these channels in each region.

Lastly, Region 45 700 MHz Regional Planning Committee encourages the Commission to permit the introduction of new 700 MHz General Use channels in a flexible manner where the channels are available to all existing allotments where the channel use can be most optimum. 700 MHz Regional plan modifications need to reiterate the Intra-Region and Inter-Region coordination protocol in use currently in the region and how these new flexible allotments will be subject to the same coordination protocol within the region. Finally, Region 45 will utilize the same intra-region and inter-region coordination practices with these new, flexible General use allotments as required in their current plan.

8.2 Air to Ground Channels

In its Report and Order (FCC 14-172) dated October 24, 2014 the FCC redesignated the 700 MHz Secondary Trunked channels and reserved them for specific Air to Ground communications between low-altitude aircraft and associated ground stations. The secondary channels are the most suitable channels for this specific Air to Ground purpose as they have no incumbents and little risk of co-channel interference since there are no current Secondary Trunked licensees.

The eight (8) 12.5 KHz Air to Ground channels are listed below:

FCC Channel	Base Frequency	Mobile Frequency	Status
21-22	769.131250	799.131250	Available
101-102	769.631250	799.631250	Available
181-182	770.131250	800.131250	Available
261-262	770.631250	800.631250	Available
659-660	773.118750	803.118750	Available
739-740	773.618750	803.618750	Available
819-820	774.118750	804.118750	Available
899-900	774.618750	804.618750	Available

The FCC also adopted a two (2) watt ERP limit for the use of these channels along with restricting airborne use of these channels to altitudes below 1500 feet Above Ground Level (AGL). To limit area impacted by the airborne operations. Given the proximity of these Secondary Trunking Channels to the designated Interoperability channels in the 700 MHz band (immediately adjacent to), the FCC assigned the responsibility for coordinating these channels to each state while permitting aircraft use on both the upper and lower portion of each Secondary Trunked Channel pair.

As indicated above, each state has been tasked with coordinating the Air to Ground Channels. If a state wants to shed that responsibility and have its respective 700 MHz regional planning committee(s) assume the responsibility of coordinating these Air to Ground channels because they are better prepared to process 700 MHz license applications the channels or the state is just not in a position to coordinate such channels, each state must request, in writing to the FCC, that this responsibility be re-assigned to the respective regional planning committee(s) in their state.

9 ALLOCATION OF GENERAL USE SPECTRUM

9.1 Narrowband Channels

Frequencies are allotted to a county area. Region 45 will utilize “**county areas**” as guidelines for channel implementation. The definition of “**county area**” in this plan is the geographical/political boundaries of a given county, plus a distance of up to 10 miles outside of the county. If after five years, a frequency allotted to a county area has not been assigned, the RPC may reallocate those frequencies. Once a license has been applied for, if after five years of licensing, a system has not been built, the committee may reassign those frequencies. Although this may not be applicable, it will require case by case review.

Allotments will be made in 25 KHz groups to allow for various digital technologies to be implemented. These allotments have been pre-determined by the CAPRAD database. The use of 25 KHz building blocks allows for technology-neutral pre-planning. Agencies using Frequency Division Multiplexing (FDMA) will be expected to maintain 12.5 KHz equivalency when developing systems and will also be expected to attempt to utilize both 12.5 KHz portions of the 25 KHz block. In most cases, this will require the geographic separation of each 12.5 KHz adjacent channel. If a licensee chooses a technology that does not use their entire 25 KHz allotment, they shall return the unused bandwidth to the region's 'general use' pool or work with the RPC and/or frequency coordinators to trade for another equivalent allotment.

9.2 Spectrum Requests for Wideband Operations

Operations greater than 25 KHz are permitted only under waiver. Waiver applications must include a letter of support from the Regional Planning Committee.

Region 45 will entertain applications for waivers to operate on aggregated spectrum at bandwidths greater than 25 KHz on a case-by-case basis. Applicants will be required to provide the Regional Planning Committee with the spectrum identified for wideband operations and an assessment of the impact of proposed wideband operations on adjacent channel allotments.

If Region 45 is satisfied that the wideband operations will not interfere with existing narrowband allotments, a letter of support will be provided to the applicant. Wideband waiver requests must be approved by the Region and the FCC.

Region 45 will support the use of guard band for wideband waiver requests.

10 AN EXPLANATION OF HOW NEEDS WERE ASSIGNED PRIORITIES IN AREAS WHERE NOT ALL ELIGIBLES COULD RECEIVE LICENSES

In the event that spectrum allocation requests conflict and cannot all be accommodated, the following matrix will be used to determine priority for allotment. This matrix will only be used if two requests are received in the same time frame for the same number of channels. Otherwise, the first come first served procedure of Section 3.1 will be used.

- Priority is given to users fundamentally involved with the protection of Life and Property (15 points)
- Priority is given to multi-agency systems that promote multi-agency, inter-discipline interoperable communications. These systems can be either a group of separate departments within a large agency or groups of agencies operating together under a large blanket agency, or a combination of both. (25 points)
- Documentation of proposed funding to construct the system using these 700 MHz frequencies must be available and accompany the original spectrum request. (25 points)

- The submission of some form of proof of financial commitment, accompanied by a RFP (Request for Proposal) outlining the design of the proposed system and detailing the development of the requested channels will be required to be submitted to the Regional Planning Committee prior to approval. (35 points)

If there are more applicants than frequencies available for a given area, the above criteria will be used to grade each application before the committee.

This process, if required, will be treated as a dispute and the procedures outlined in Appendix I using the above criteria will be used to allocate the frequencies.

11 AN EXPLANATION OF HOW ALL THE REGION ELIGIBLES' NEEDS WERE CONSIDERED, AND TO THE EXTENT POSSIBLE, MET

Applicants may submit applications electronically to the regional chair at any time. Upon receipt of a complete application package, the chair will schedule a meeting of the Regional Review Committee. Notice of the meeting will be circulated throughout the region's public safety community. At the meeting, the Regional Review Committee will review the application. The applicant may appear to make a presentation and answer questions. In the event of competing applications, the Priority Matrix will be applied to all applications. The highest scoring application will receive priority consideration for frequency assignment.

12 ADJACENT REGION COORDINATION

To allot 700 MHz channels near the Region borders, a 25 kHz building block will be used. Since there may be multiple technologies (FDMA, TDMA, etc.), bandwidths (6.25, 12.5, 25 kHz), and modulations, 25 kHz is the common bandwidth allowing any technology to be used. The use of 25 kHz building blocks allows for technology-neutral pre-planning. If a licensee chooses a technology that does not use their entire 25 kHz allotment, they shall return the unused bandwidth to the region's 'general use' pool or work with the RPC and/or frequency coordinators to trade for another equivalent allotment.

If agencies choose a technology that requires less than 25 kHz channel bandwidth for their system, there is the potential for residual, "orphaned channels" of 6.25 kHz or 12.5 kHz bandwidth immediately adjacent to the assigned channel within a given county area. An orphan channel may be used at another location within the county area where it was originally approved, if it meets co- and adjacent channel interference criteria. Region 45 will utilize "**county areas**" as guidelines for channel allocation with the area of Region 45. The definition of "**county area**" in this plan is the geographical/political boundaries of a given county, plus a distance of up to 10 miles outside of the county.

If the channel, or a portion of a channel, is being moved into a "county area" that is within 30 miles of an adjacent region, Region 45 will receive concurrence from the affected Region. By extending the "county area" by a designated distance, it is anticipated this will increase the

possibility that orphaned channel remainders will still be able to be utilized within the county area”, and reduce the potential for channel remainders to be forced to lay dormant and used with a county channel allotment. These movements will be documented on the National Public Safety Telecommunications Council CAPRAD database.

If the “orphaned channel” remainder does not meet co-channel and adjacent channel interference criteria by moving it within the “county area” as listed above, and it is determined by the region that the “orphaned channel” cannot be utilized in the region without exceeding the distance described in the “county area” listed above, Region 45 will repack the channel to a location where its potential use will maintain maximum spectral efficiency. This will require affected Region concurrence.

When in the best interest of public safety communications and efficient spectrum use within the Region, the Region 45 Regional Planning Committee shall have the authority to move orphan channel allotments, and/or co-/adjacent-channel allotments affected by the movement of orphan channels, within its “county areas”, which are defined above. This is to retain spectrum efficiency and/or minimize co-channel or adjacent channel interference between existing allotments within the region utilizing disparate bandwidths and technologies.

The Regions adjacent to Region 45 are listed below:

- Region 13 Southern Illinois
- Region 15 Iowa
- Region 21 Michigan
- Region 22 Minnesota
- Region 54 South Lake Michigan

Region 45 has coordinated channel allocations and received concurrence with all bordering Regions by providing copies of the Region 45 plan (including channel allotments) to each adjacent Region using the CAPRAD database and by mailing hard copies of the Plan to the adjacent Region’s Chairperson or Convener.

The Region 45 Plan is available for viewing by all regions via the NPSTC CAPRAD 700 MHz database. The NPSTC precoordination database will show those channels available that will not interfere with Region 45 allotments or systems.

The CAPRAD database and its associated packing plan will provide minimum channel allotments for all of Region 45’s bordering regions. This method was recommended by the NCC Implementation Subcommittee as a way to assure that adjacent Regions, which did not enter the Regional Planning process immediately, would not find all frequencies assigned in their borders.

Therefore, adjacent regions should all be able to satisfy voice and narrowband data requests along their border areas with Region 45. However, if an adjacent Region has difficulties satisfying intra-regional requests due to channel allocation within Region 45, this committee

pledges to work with that adjacent Region to resolve any issues that benefit public safety communications.

13 A DETAILED DESCRIPTION OF HOW THE PLAN PUT SPECTRUM TO THE BEST POSSIBLE USE

Previous sections of the Plan discuss channel loading and the expectation that trunking technology will be used in most 700 MHz systems. Throughout the planning process, we evaluated all frequency resources that were available for use, and how these resources will best meet the needs of all users.

14 A DETAILED DESCRIPTION OF THE FUTURE PLANNING PROCEDURES

The CAPRAD pre-coordination database will be used to retain channel allotments in each county within Region 45 using criteria such as current population, 2010 Census data, height above average terrain (HAAT) and public safety use curves generated by the Public Safety Wireless Advisory Committee to provide spectrally efficient frequency allotments.

In addition to CAPRAD posting, the Region 45 Executive Board and designee will maintain electronic or hard copy formats of all correspondence. These records will be available for inspection with reasonable notice.

In the event that a dispute arises between Region 45 and an adjacent Region or Regions, regarding spectrum allocations or implementation that cannot be resolved within 60 days, the parties to the dispute will request a hearing by the National Regional Planning Oversight Committee.

See **Appendix H** for details and Inter-Regional Dispute Resolution Agreements to be signed by adjacent Regions 13, 15, 21, 22, and 54.

The Region 45 RPC will periodically update CAPRAD, monitor implementation of the system, and modify the Region 45 plan as needed.

Appendix I describes the Regional Committee Dispute Resolution Process.

15 A CERTIFICATION BY THE REGIONAL PLANNING CHAIRPERSON THAT ALL PLANNING COMMITTEE MEETINGS, INCLUDING SUBCOMMITTEE OR EXECUTIVE COMMITTEE MEETINGS WERE OPEN TO THE PUBLIC

The Region 45 700 MHz Planning Committee derives its authority to carry out the activities required for composition and implementation of this Plan from the Commission's Report and Order General Docket No. 96-86 released on 9/29/98. I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the public.



Signed _____

Russell Schreiner, Region 45 RPC Chairperson

**16 A CERTIFICATION BY THE REGIONAL PLANNING CHAIRPERSON THAT
DISPUTE RESOLUTION PROCEDURES HAVE BEEN REVIEWED BY ALL
ADJACENT REGIONS AND THE RESOLUTION PROCESS HAS BEEN AGREED
TO VIA THE RECEIPT OF THE REGIONAL LETTER OF CONCURRENCE**

The Region 45 700 MHz Planning Committee has provided a Regional Committee Dispute Resolution Process. This process ensures an open and understandable procedure for the general public. This process will also provide a uniform and standardized response method for any licensee involved in an appeal.

This Regional Committee Dispute Resolution Process has been made a formal part of the 700 MHz Region 45 plan by the inclusion of this process in “Appendix I: Dispute Resolution Process.”

All adjacent regions have approved this Dispute Resolution Process as a part of their review of the overall Region 45 plan. With this in mind, their concurrence of the Regional Committee Dispute Resolution Process can then be found in “Appendix N: Adjacent Region Letters of Concurrence.”



Signed _____

Russell Schreiner, Region 45 RPC Chairperson

15 A CERTIFICATION BY ADJECENT REGIONS THAT INTER-REGIONAL COORDINATION PROCEDURES AND RESOLUTION OF DISPUTE PROCEDURES HAVE BEEN REVIEWED AND MUTUALLY AGREED TO

The Region 45 700 MHz Planning Committee has provided a Regional Committee Dispute Resolution Process. This process ensures an open and understandable procedure for the general public. This process will also provide a uniform and standardized response method for any licensee involved in an appeal.

This Regional Committee Dispute Resolution Process has been made a formal part of the 700 MHz Region 45 plan by the inclusion of this process in "Appendix I: Dispute Resolution Process."

Region 13 has approved this Dispute Resolution Process as a part of their review of the overall Region 45 plan. With this in mind, **Region 13** concurrence of the Region 45 Inter-regional Dispute Resolution Process and signature can be found affixed to this document.



Signed _____

Russell Schreiner,
Region 45 RPC Chairperson

Signed  Date 4/26/07


Gary Cochran,
Region 13 RPC Chairperson

15 A CERTIFICATION BY ADJECENT REGIONS THAT INTER-REGIONAL COORDINATION PROCEDURES AND RESOLUTION OF DISPUTE PROCEDURES HAVE BEEN REVIEWED AND MUTUALLY AGREED TO

The Region 45 700 MHz Planning Committee has provided a Regional Committee Dispute Resolution Process. This process ensures an open and understandable procedure for the general public. This process will also provide a uniform and standardized response method for any licensee involved in an appeal.

This Regional Committee Dispute Resolution Process has been made a formal part of the 700 MHz Region 45 plan by the inclusion of this process in "Appendix I: Dispute Resolution Process."

Region 15 has approved this Dispute Resolution Process as a part of their review of the overall Region 45 plan. With this in mind, **Region 15** concurrence of the Region 45 Inter-regional Dispute Resolution Process and signature can be found affixed to this document.



Signed _____

Russell Schreiner,
Region 45 RPC Chairperson

Signed Richard H. Hester Date 4-27-07

Richard Hester,
Region 15 RPC Chairperson

15 A CERTIFICATION BY ADJECENT REGIONS THAT INTER-REGIONAL COORDINATION PROCEDURES AND RESOLUTION OF DISPUTE PROCEDURES HAVE BEEN REVIEWED AND MUTUALLY AGREED TO

The Region 45 700 MHz Planning Committee has provided a Regional Committee Dispute Resolution Process. This process ensures an open and understandable procedure for the general public. This process will also provide a uniform and standardized response method for any licensee involved in an appeal.

This Regional Committee Dispute Resolution Process has been made a formal part of the 700 MHz Region 45 plan by the inclusion of this process in "Appendix I: Dispute Resolution Process."

Region 21 has approved this Dispute Resolution Process as a part of their review of the overall Region 45 plan. With this in mind, **Region 21** concurrence of the Region 45 Inter-regional Dispute Resolution Process and signature can be found affixed to this document.



Signed _____

Russell Schreiner,
Region 45 RPC Chairperson



Signed _____ Date April 27, 2007

Joseph M. Turner,
Region 21 RPC Chairperson

Inter-Regional Coordination Procedures and Procedures for Resolution of Disputes That May Arise Under FCC Approved Plans

I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures Agreement (Agreement) by and between the Region 45 and Region 22 700 MHz Regional Planning Committees.

II. INTER-REGIONAL COORDINATION AGREEMENT

The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 45 and 22, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees, when a license application is made which is inconsistent with the approved Regional Plan.

a. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.

b. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review.¹ This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

c. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

d. If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent

¹ If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service area or interference shall be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between agencies, i.e. mutual aid agreements.

Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:

- (i) Unconditional concurrence;
- (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
- (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.

e. If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)², of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

f. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.

g. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).

h. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications

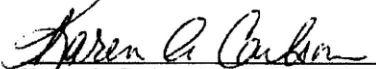
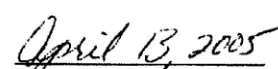
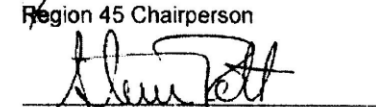

² The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

to the frequency coordinator for processing and filing with the Commission.

III. CONCLUSION

IN AGREEMENT HERETO, Regions 45 and 22 do hereby set their signatures.

Respectfully,

 Karen A. Carlson Region 45 Chairperson	 Date
 Steve Pott Region 22 Chairperson	 Date

15 A CERTIFICATION BY ADJECENT REGIONS THAT INTER-REGIONAL COORDINATION PROCEDURES AND RESOLUTION OF DISPUTE PROCEDURES HAVE BEEN REVIEWED AND MUTUALLY AGREED TO

The Region 45 700 MHz Planning Committee has provided a Regional Committee Dispute Resolution Process. This process ensures an open and understandable procedure for the general public. This process will also provide a uniform and standardized response method for any licensee involved in an appeal.


This Regional Committee Dispute Resolution Process has been made a formal part of the 700 MHz Region 45 plan by the inclusion of this process in "Appendix I: Dispute Resolution Process."

Region 54 has approved this Dispute Resolution Process as a part of their review of the overall Region 45 plan. With this in mind, **Region 54** concurrence of the Region 45 Inter-regional Dispute Resolution Process and signature can be found affixed to this document.



Signed _____

Russell Schreiner,
Region 45 RPC Chairperson

Signed  Date 3-29-07

William J. Carter,
Region 54 RPC Chairperson

Appendix A: BYLAWS OF REGION 45:

DATE: May 8, 2003

BYLAWS OF REGION 45

ARTICLE 1

NAME & PURPOSE

- 1.1 Name and purpose. The name of this Region shall be **Region 45 700 MHz Planning Committee**, commonly referred to as the *Wisconsin Region*. This region consists of sixty-one (61) of the seventy-two (72) counties in Wisconsin. The eleven (11) counties in southeastern Wisconsin are part of Region 54. The Committee's primary purpose is to design, develop and implement a regional plan for the use of radio frequencies in the 700 MHz Public Safety Band throughout the specified service area.

ARTICLE II

MEMBERS

For purposes of this Article, the term "member," unless otherwise specified, refers to both voting and non-voting members.

- 2.1 Number, Election and Qualification. The Regional Planning Committee (RPC) shall have two classes of members, "voting members" and "non-voting members." New members may be added at annual, special, or regular meetings.

Voting Members. Voting members shall consist of one (1) representative from each eligible public safety agency participating on the Region 45 RPC, and each frequency advisor who is authorized by the FCC to perform frequency coordination tasks for the spectrum in the 764-776/794-806 band.

Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.

- 2.2 Tenure. In general, each member shall hold membership from the date of acceptance until resignation or removal.
- 2.3 Powers and Rights. In addition to such powers and rights as are vested in them by law, or these bylaws, the members shall have such other powers and rights as the membership may determine.
- 2.4 Suspension and Removal. A member may be suspended or removed with cause by vote of a majority of members after reasonable notice and opportunity to be heard. Failure to attend 50% of general membership meetings held in a calendar year shall be a specific cause for removal from the membership.

2.5 Resignation. A member may resign by delivering written resignation to the chair, vice-chair, treasurer or secretary of the Regional Committee or to a meeting of the members.

2.6 Annual Meetings. The annual meeting of the members shall be held during the month of January of each year.

If an annual meeting is not held as herein provided, a special meeting of the members may be held in place thereof with the same force and effect as the annual meeting, and in such case all references in these bylaws, except in this Section 2.6, to the annual meeting of the members shall be deemed to refer to such special meeting. Any such special meeting shall be called and notice shall be given as provided in Section 2.7 and 2.8.

2.7 Special Meetings. Special meetings of the members may be held at any time and at any place within the Regional Committee area. Special meetings of the members may be called by the chair or by the vice-chair, or in case of death, absence, and incapacity, by any other officer or, upon written application of two or more members.

2.8 Call and Notice.

A. Annual meetings. Reasonable notice of the time and place of special meetings of the members shall be given to each member. Such notice need not specify the purposes of a meeting, unless otherwise required by law or these bylaws or unless there is to be considered at the meeting (i) amendments to these bylaws, (ii) an increase or decrease in the number of members, or (iii) removal or suspension of a member who is an officer.

B. Reasonable and sufficient notice. Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a member to send notice by mail at least five days or by e-mail/facsimile at least three days before the meeting, addressed to such member at his or her usual or last known business address; or, to give notice to such member in person or by telephone at least three days before the meeting.

2.9 Quorum. At any meeting of the members a minimum of five voting members shall constitute a quorum. Any meeting may be adjourned to such date or dates not more than ninety days after the first session of the meeting by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

2.10 Action by Vote. Each voting member, representing a particular agency (one vote per agency) shall have one vote; non-voting members have no right to vote. When a quorum is present at any meeting, a majority of the votes properly cast by voting members present shall decide any question, including election to any office, unless otherwise provided by law or these bylaws.

- 2.11 Action by Writing. Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if all members entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of the members. Such consents shall be treated for all purposes as a vote at a meeting.
- 2.12 Proxies. Voting members may vote either in person or by written proxy dated not more than one month before the meeting named therein, which proxies shall be filed before being noted with the secretary or other person responsible for recording the proceedings of the meeting. Unless otherwise specifically limited by their terms, such proxies shall entitle the holders thereof to vote at any meeting by the proxy and shall terminate after the final adjournment of such meeting.

ARTICLE III OFFICERS AND AGENTS

- 3.2 Number and qualification. The officers of the Regional Committee shall be a chair, vice-chair, treasurer, secretary and such other officers, if any, as the voting members may determine.
- 3.3 Election. The officers shall be elected by the voting members.
- 3.4 Tenure. The officers shall each hold office until the annual meeting of the members held one year from the adoption of these bylaws, or until their successor, if any, is chosen, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified. Subsequent election of officers shall be held at each annual meeting.
- 3.5 Chair and Vice-chair. The chair shall be the chief executive officer of the Regional Committee and, subject to the control of the voting members, shall have general charge and supervision of the affairs of the Regional Committee. The chair shall preside at all meetings of the Regional Committee. The Vice-chair shall have such duties and powers as the voting members shall determine. The vice-chair shall have and may exercise all the powers and duties of the chair during the absence of the chair or in the event of his or her inability to act.
- 3.6 Treasurer. The treasurer shall be the chief financial officer and the chief accounting officer of the Regional Committee. The treasurer shall be in charge of its financial affairs, funds, and valuable papers and shall keep full and accurate records thereof.
- 3.7 Secretary. The secretary shall record and maintain records of all proceedings of the members in a file or series of files kept for that purpose, which file or files shall be kept within the Region and shall be open at all reasonable times to the inspection of any member. Such file or files shall also contain records of all meetings and the original, or attested copies, of bylaws and names of all members and the address (including e-mail address, if available) of each. If the secretary is absent from any meeting of members, a temporary secretary chosen at the meeting shall exercise the duties of the secretary at the meeting.

- 3.8 Suspension or Removal. An officer may be suspended with cause by vote of a majority of the voting members.
- 3.9 Resignation. An officer may resign by delivering his or her written resignation to the chair, vice-chair, treasurer, or secretary of the Regional Committee. Such resignation shall be effective upon receipt (unless specified to be effective at some other time), and acceptance thereof shall not be necessary to make it effective unless it so states.
- 3.10 Vacancies. If the office of any officer becomes vacant, the Chair shall appoint a successor. Each such successor shall hold office for the remainder of the term, after which a new officer shall be elected by the membership.

ARTICLE IV SUBCOMMITTEES

- 4.1 Assignment of Tasks. For purposes of dividing the tasks associated with developing and administering this Plan, the Regional Committee shall be organized into Subcommittees. Each subcommittee shall consist of volunteer chair and members. Other subcommittees may be created by a majority of membership votes.
- 4.2 Number and Purpose. Initially, the Regional Committee shall be divided into the following seven (7) subcommittees for the purposes stated in this section. Subcommittees will exist only until such time as their purpose has been fulfilled.
- 4.2.1 Executive. This subcommittee shall be comprised of the Committee Officers plus a State Frequency Specialist (or designee). Its initial purpose is to develop and submit the Plan to the FCC. After approval by the Commission, the Executive Subcommittee will administer all of the Plan's policies and procedures, ensuring that the 700 MHz spectrum is adequately and fairly distributed among Region 45 Public Safety entities. The Executive Subcommittee will continue to exist until such time that the Region 45 700 MHz Planning Committee itself is dissolved in accordance with the conditions set forth under Article VI of these bylaws.
- 4.2.2 Interoperability. The Interoperability Subcommittee will be comprised of volunteers representing as many different public safety agencies as possible. Its purpose is to identify inter-agency communication requirements throughout the Region. It will also foster cooperation and develop any necessary inter-agency agreements. It will consider and make recommendations on issues such as Incident Command Structure, policy and procedures of operation of the Interoperability Channels, inter-agency memoranda of understanding, etc.
- 4.2.3 Membership. The Membership Subcommittee shall be comprised of the Committee Officers plus a Region 45 Frequency Advisor (or designee). They will consider and make recommendations on issues such as eligibility, methods of recruiting a broad base

of public safety organizations including Native Americans (i.e. notification of eligibles). The Membership Subcommittee will review and approve the voting eligibility of each designated agency representative. The Membership Subcommittee will also ensure that the membership database is kept current.

- 4.2.4 Technical. The Technical Subcommittee will be comprised of as many volunteers as feasible for a working group. It will research, consider and make recommendations on issues such as use of a pre-coordination database, frequency reuse, availability of channels, loading criteria, etc.
- 4.2.5 Implementation. The Implementation Subcommittee will be comprised of as many volunteers as feasible for a working group. It will consider and make recommendations on issues such as application evaluation, frequency coordination, application submittal to the FCC, etc.
- 4.2.6 4.9 GHz. The 4.9 GHz Subcommittee will be comprised of as many volunteers as feasible for a working group. It will research, consider and make recommendations on issues such as use of a pre-coordination database, frequency reuse, availability of channels, loading criteria, etc.
- 4.2.7 Financial. The Financial Subcommittee shall be comprised of the Committee Officers plus a Region 45 Frequency Advisor (or designee). It will consider and make recommendations for issues such as applying for federal grant monies, reimbursement of agency expenses incurred as a result of this Plan, identifying alternative methods of funding, etc.

ARTICLE V AMENDMENTS

These bylaws may be altered, amended or repealed in whole or in part by vote. The voting members may by a two-thirds vote, alter, amend, or repeal any bylaws adopted by the Regional Committee members or otherwise adopt, alter, amend or repeal any provision which FCC regulations, or these bylaws, require.

ARTICLE VI DISSOLUTION

This Regional Committee may be dissolved by the consent of two-thirds plus one of the members in good standing at a special meeting called for such purpose. The FCC shall be notified.

Appendix B: REGION 45 NOTIFICATION:

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
State	Wisconsin State Patrol/BOC	Hewitt	David	Bureau Dtr	6082660184	david.hewitt@dot.state.wi.us
EMS	Flight For Life	Mason	David	RN EMT-P		dmason@mrmcfl.org
State	DMA-WEM Central					DMA-WEMCentral@dma.state.wi.us
State	DMA-WEM CO EM DIR					wemcodir@dma.state.wi.us
State	DMA-WEM CO Sheriffs					DMA-WEMCo.Sheriffs@dma.state.wi.us
State	DMA-WEM Regional Offices					WemRegionalOffices@dma.state.wi.us
		Furlow	Christopher			Christopher_Furlow@who.eop.gov
	Dept. of Health and Family Srv	Klawitter	Janet			KlawiJM@dhfs.state.wi.us
Private	WI Funeral Dtrs Association	Paget	Mark	Executive Dtr		info@wfda.org
State	Dept. of Natural Resources	Ross	Chad			Chad.Ross@dnr.state.wi.us
State	Dept. of Administration			GOV PIOs		PIOs@doa.state.wi.us
State	WI Legislature			Legislative-Assembly		ALLASM@legis.state.wi.us
State	WI Senate			Legislative-Senate		ALLSEN@legis.state.wi.us
State	WI Govenor's Office	Aehl	James			James.Aehl@gov.state.wi.us
State	Dept. of Commerce	Albert	Phil			palbert@commerce.state.wi.us
Private	Alliant Energy	Evitch	Frank	Mgr of Security Srv		FrankEvitch@alliantenergy.com
State	Dept. of Health and Family Srv	Anderson	Thomas			ANDERTN@dhfs.state.wi.us
Federal	FEMA	Bailey	Larry			larry.bailey@fema.gov
Federal	FEMA	Bement	Dan			dan.bement@fema.gov
		Coker	Bobbi			roberta.coker@wimilw.ang.af.mil
Private	Dept. of Revenue	Chandler	Richard			richard.chandler@dor.state.wi.us
County	Racine Co Sheriff	Mallwitz	Connie	Sheriff		conniem@racineco.com
State	Dept. of Revenue	Conway	Bill			bill.conway@dor.state.wi.us
State	Dept. of Transportation	Cross	Roger			roger.cross@dot.state.wi.us
State		Denson	Kerry			kerry.denson@wi.ngb.army.mil
State		DeVries	Mark	Commander		MDevries@msomilwaukee.uscg.mil
State		Donovan	Tim			tim.donovan@wi.ngb.army.mil
Private	WE Energies	Eells	Thomas			thomas.eells@we-energies.com

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
Federal	FEMA			FEMA Region V Dtr		r05-roc-dir@fema.gov
State	Dept. of Employee Relations	Fox	Peter			Peter.Fox@der.state.wi.us
Private	Broydrick & Associates	Cumberbatch	Franklin	Lobbyist		fcumberbatch@broydrick.com
Local	Wisconsin Rapids Fire Dept.	Gignac	Jim	Chief		ccchf@wctc.net
State	Dept. of Military Affairs	Gleason	Ed	Administrator		ed.gleason@dma.state.wi.us
State	Dept. of Ag., Trade & Cons Prot	Harsdorf	James			James.Harsdorf@datcp.state.wi.us
State	Dept. of Commerce	Herrera	Oscar			oherrera@commerce.state.wi.us
State	Dept. of Tourism	Hertel	Julia			jhertel@travelwisconsin.com
		Jerney	Jim			Jim.Jerney@courts.state.wi.us
		Kundert	Jack			Jack.Kundert@dfi.state.wi.us
Private	WE Energies	Kuss	Vivian			Vivian.Kuss@we-energies.com
State	Dept. of Administration	Marotta	Mark	Secretary		marc.marotta@doa.state.wi.us
County	Adams Co Sheriff	Sindelar	Roberta	Sheriff	6083393304	
County	Ashland Co Sheriff	Kovach	John	Sheriff	7156857640	john.kovach@co.ashland.wi.us
County	Barron Co Sheriff	Richie	Thomas	Sheriff	7155373106	richie@bnso.org
County	Bayfield Co Sheriff	Follis	Robert	Sheriff	7153736300	rfollis@bayfieldCo.org
County	Brown Co Sheriff	Kocken	Dennis	Sheriff	9204484222	
County	Buffalo Co Sheriff	Schreiner	Harry	Sheriff	6086854433	
County	Burnett Co Sheriff	Roland	Dean	Sheriff	7153492121	
County	Calumet Co Sheriff	Pagel	Jerry	Sheriff	9208492335	sheriff@co.calumet.wi.us
Tribal	Bad River Band of Lake Superior Chippewa Indians	Wilmer	Bob	Chief Warden	7156827111	bwilmer54@hotmail.com
County	Chippewa Co Sheriff	Ellis	Douglas	Sheriff	7157267701	dellis@co.chippewa.wi.us
County	Clark Co Sheriff	Rosandich	Louis	Sheriff	7157433157	
County	Columbia Co Sheriff	Rowe	Steven	Sheriff	6087424166	
County	Crawford Co Sheriff	Ostrander	Robert	Sheriff	6083260241	
County	Dane Co Sheriff	Hamblin	Gary	Sheriff	6082846170	
County	Dodge Co Sheriff	Nehls	Todd	Sheriff	9203863726	tnehl@co.dodge.wi.us
County	Door Co Sheriff	Vogel	Terry	Sheriff	9207462415	tvogel@co.door.wi.us
County	Douglas Co Sheriff	Dalbec	Thomas	Sheriff	7153951371	
County	Dunn Co Sheriff	Smith	Dennis	Sheriff	7152321348	

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
County	Eau Claire Co Sheriff	Cramer	Ron	Sheriff	7158394709	sheriff@co.eau-claire.wi.us
County	Florence Co Sheriff	Rickaby	Jeff	Sheriff	7155283346	
County	Fond du Lac Co Sheriff	Pucker	Gary	Sheriff	9209293372	gpucker@co.fond-du-lac.wi.us
County	Forest Co Sheriff	Wilson	Roger	Sheriff	7154783331	
County	Grant Co Sheriff	Govier	Keith	Sheriff	6087232157	skgovier@pcii.net
County	Green Co Sheriff	Roderick	Randall	Sheriff	6083289400	roderickr@greensheriff.com
County	Green Lake Co Sheriff	Handel	Michael	Sheriff	9202944134	mhandel@mail.co.green-lake.wi.us
County	Iowa Co Sheriff	Michek	Steven	Sheriff	6089353314	
County	Iron Co Sheriff	Bruneau	Robert	Sheriff	7155612440	
County	Jackson Co Sheriff	Young	Richard	Sheriff	7152849009	sheriff@co.jackson.wi.us
County	Jefferson Co Sheriff	Milbrath	Paul	Sheriff	9206747310	
County	Juneau Co Sheriff	Oleson	Brent	Sheriff	6088475649	sheriff1@co.juneau.wi.us
County	Kenosha Co Sheriff	Beth	David	Sheriff	2626055101	dbeth@co.kenosha.wi.us
County	Kewaunee Co Sheriff	Cmeyla	John	Sheriff	9203883100	
County	La Crosse Co Sheriff	Weissenberger	Michael	Sheriff	6087859629	weissenberger.mike@co.la-crosse.wi.us
County	Lafayette Co Sheriff	Pedley	Scott	Sheriff	6087764870	lcso@mhtc.net
County	Langlade Co Sheriff	Steger	David	Sheriff	7156276411	
County	Lincoln Co Sheriff	Koth	Thomas	Sheriff	7155366272	
County	Manitowoc Co Sheriff	Peterson	Kenneth	Sheriff	9206834200	kjp0114@mtso.manitowoc.wi.us
County	Marathon Co Sheriff	Hoenisch	Randall	Sheriff	7152611200	
County	Marinette Co Sheriff	Kessler	Michael	Sheriff	7157327600	
County	Marquette Co Sheriff	Fullmer	Ray	Sheriff	6082972115	
County	Menominee Co Sheriff	Lepscier	Bryan	Sheriff	7157993357	
County	Milwaukee Co Sheriff	Clarke, Jr.	David	Sheriff	4142784766	dclarke@milwcnty.com
County	Monroe Co Sheriff	Amundson	Charles	Sheriff	6082692117	camundson@co.monroe.wi.us
County	Oconto Co Sheriff	Jansen	Michael	Sheriff	9208346901	mike.jansen@co.oconto.wi.us
County	Oneida Co Sheriff	Miller	Timothy	Sheriff	7153615100	
County	Outagamie Co Sheriff	Gehring	Bradley	Sheriff	9208325605	gehrinbg@co.outagamie.wi.us
County	Ozaukee Co Sheriff	Straub	Maury	Sheriff	2622847172	mstraub@co.ozaukee.wi.us
County	Pepin Co Sheriff	Andrews	John	Sheriff	7156725945	
County	Pierce Co Sheriff	Muhlhouse	Everett	Sheriff	7152735051	emuhlhou@co.pierce.wi.us

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
		n				
County	Polk Co Sheriff	Hraychuck	Ann	Sheriff	7154858300	annh@co.polk.wi.us
County	Portage Co Sheriff	Charewicz	John	Sheriff	7153461400	
County	Price Co Sheriff	Krenzke	Wallace	Sheriff	7153393011	sheriff@co.price.wi.us
County	Richland Co Sheriff	Berglin	Darrell	Sheriff	6086472106	
County	Racine Co Sheriff	McReynolds	William	Sheriff	2626363203	williamm@racineco.com
County	Rock Co Sheriff	Runaas	Eric	Sheriff	6087578000	
County	Rusk Co Sheriff	Meyer	Dean	Sheriff	7155322189	dcmeyer@centurytel.net
County	Sauk Co Sheriff	Stammen	Randy	Sheriff	6083564895	rstammen@co.sauk.wi.us
County	Sawyer Co Sheriff	Meier	James	Sheriff	7156344858	
County	Shawano Co Sheriff	Schmidt	R.A.	Sheriff	7155267905	LAW501@co.shawano.wi.us
County	Sheboygan Co Sheriff	Helmke	Michael	Sheriff	9204593111	helmkmwh@co.sheboygan.wi.us
County	St. Croix Co Sheriff	Hillstead	Dennis	Sheriff	7153814320	dennish@co.saint-croix.wi.us
County	Taylor Co Sheriff	Kay	Jack	Sheriff	7157482200	kay@mail.co.taylor.wi.us
County	Trempealeau Co Sheriff	Niederkorn	Randy	Sheriff	7155384509	
County	Vernon Co Sheriff	Cary	Gene	Sheriff	6086372123	vcsoadmin@mwt.net
County	Vilas Co Sheriff	Niebuhr	John	Sheriff	7154794441	jonieb@co.vilas.wi.us
County	Walworth Co Sheriff	Graves	David	Sheriff	2627414400	
County	Washburn Co Sheriff	Dryden	Terry	Sheriff	7154684700	tdryden@co.washburn.wi.us
County	Washington Co Sheriff	Theusch	Jack	Sheriff	2623354388	jack.theusch@co.washington.wi.us
County	Waukesha Co Sheriff	Trawicki	Daniel	Sheriff	2625487117	
County	Waupaca Co Sheriff	Liebe	Steve	Sheriff	7152584466	
County	Waushara Co Sheriff	Peterson	Dave	Sheriff	9207873321	david.SHERIFF@co.waushara.wi.us
County	Winnebago Co Sheriff	Brooks	Michael	Sheriff	9202364900	
County	Wood Co Sheriff	Heuer	Kurt	Sheriff	7154218715	kheuer@co.wood.wi.us
County	Adams Co Em Mgmt	Gruber	Mary	Em Mgmt. Dtr	6083394248	emmgmt@co.adams.wi.us
County	Ashland Co Em Mgmt	Hnath	Jim	Em Mgmt. Dtr	7156857647	jim.hnath@co.ashland.wi.us
County	Barron Co Em Mgmt	Books	Randy	Em Mgmt. Dtr	7155376595	bcem@chibardun.net
County	Bayfield Co Em Mgmt	Victorson	Jan	Em Mgmt. Dtr	7153736113	baycoem@ncis.net
County	Brown Co Em Mgmt	Peltier	Cullen	Em Mgmt. Dtr	9204484270	peltier_CS@co.brown.wi.us
County	Buffalo Co Em Mgmt	Crawford	Shane	Em Mgmt. Dtr	6086856213	

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
County	Burnett Co Em Mgmt	Sichta	Roberta	Em Mgmt. Dtr	7153492171	bobbi.sichta@dss.co.burnett.wi.us
County	Calumet Co Em Mgmt	Nordeng	Chris	Em Mgmt. Dtr	9208491473	chris@co.calumet.wi.us
County	Chippewa Co Em Mgmt	Brown	Dennis	Em Mgmt. Dtr	7157267727	dbrown@co.chippewa.wi.us
County	Clark Co Em Mgmt	Brom	Janice	Em Mgmt. Dtr	7157435100	jan.brom@co.clark.wi.us
County	Columbia Co Em Mgmt	Carlin	Tim	Em Mgmt. Dtr	6087424166	
County	Crawford Co Em Mgmt	Martin	Roger	Em Mgmt. Dtr	6083260266	ccem@mhtc.net
County	Dane Co Em Mgmt	Krusiec	Kathy	Em Mgmt. Dtr	6082664330	krusiec@co.dane.wi.us
County	Dodge Co Em Mgmt	Soblewski	Molly	Em Mgmt. Dtr	9203863726	msoblewski@co.dodge.wi.us
County	Door Co Em Mgmt	DeMeuse	Ann	Em Mgmt. Dtr	9207467101	ademeuse@co.door.wi.us
County	Douglas Co Em Mgmt	Kesler	Keith	Em Mgmt. Dtr	7153951391	kkesler@douglasCowi.org
County	Dunn Co Em Mgmt	Hitchcock	Brian	Em Mgmt. Dtr	7152326897	
County	Eau Claire Co Em Mgmt	Swanstrom	Hal	Em Mgmt. Dtr	7158394736	hal.swanstrom@co.eau-claire.wi.us
County	Florence Co Em Mgmt	Gribble	David	Em Mgmt. Dtr	7155283346	905@florencewi.net
County	Fond du Lac Co Em Mgmt	Wilmot	Kathy	Em Mgmt. Dtr	9209292911	kathy.wilmot@co.fond-du-lac.wi.us
County	Forest Co Em Mgmt	Huettl	Teresa	Em Mgmt. Dtr	7154783430	fcem@co.forest.wi.us
County	Grant Co Em Mgmt	Braun	Steve	Em Mgmt. Dtr	6087237171	gcemds@pcii.net
County	Green Co Em Mgmt	Ingwell	Keith	Em Mgmt. Dtr	6083289415	ingwlk@tds.net
County	Green Lake Co Em Mgmt	Podoll	Gary	Em Mgmt. Dtr	9207870412	gpodoll@dotnet.com
County	Iowa Co Em Mgmt	Palzkill	Kenneth	Em Mgmt. Dtr	6089355100	ken.palzkill@mail.iowaCo.org
County	Iron Co Em Mgmt	Gotta	Gary	Em Mgmt. Dtr	7155613266	
County	Jackson Co Em Mgmt	Elliott	John	Em Mgmt. Dtr	7152840263	john.elliott@co.jackson.wi.us
County	Jefferson Co Em Mgmt	Nehmer	Joseph	Em Mgmt. Dtr	9206747260	joen@co.jefferson.wi.us
County	Juneau Co Em Mgmt	Thompson	Gervase	Em Mgmt. Dtr	6088479393	juneauem@co.juneau.wi.us
County	Kenosha Co Em Mgmt	Schliesman	Bennett	Em Mgmt. Dtr	2626057900	bschliesman@co.kenosha.wi.us
County	Kewaunee Co Em Mgmt	Hucek	Lori	Em Mgmt. Dtr	9204875257	
County	La Crosse Co Em Mgmt	Lenser	Jeanette	Em Mgmt. Dtr	6087894811	lenser.jeanette@co.la-crosse.wi.us
County	Lafayette Co Em Mgmt	Reichling	John	Em Mgmt. Dtr	6087764870	fjreichling@yahoo.com
County	Langlade Co Em Mgmt	Hovland-Frisch	Kathleen	Em Mgmt. Dtr	7156276257	kfrisch@co.langlade.wi.us
County	Lincoln Co Em Mgmt	Sladek	Brian	Em Mgmt. Dtr	7155366228	bsladek@co.lincoln.wi.us
County	Manitowoc Co Em Mgmt	Crowley	Nancy	Em Mgmt. Dtr	9206834207	ncrowley@powercom.net
County	Marathon Co Em Mgmt	Boettcher	Jerry	Em Mgmt. Dtr	7152611229	jfboettcher@mail.co.marathon.wi.us

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
County	Marinette Co Em Mgmt	Lowman	Erik	Em Mgmt. Dtr	7157327660	egov@marinetteCo.com
County	Marquette Co Em Mgmt	Church	Rollin	Em Mgmt. Dtr	6082979125	Rchurch@co.marquette.wi.us
County	Menominee Co Em Mgmt	Corn	Ronald	Em Mgmt. Dtr	7157993024	LonaS@co.menominee.wi.us
County	Milwaukee Co Em Mgmt			Em Mgmt. Dtr	4142784709	
County	Monroe Co Em Mgmt	Struve	Cynthia	Em Mgmt. Dtr	6082698711	cstruve@co.monroe.wi.us
County	Oconto Co Em Mgmt	LeBreck	Patrick	Em Mgmt. Dtr	9208346850	pat.lebreck@co.oconto.wi.us
County	Oneida Co Em Mgmt	Kortenhof	Kenneth	Em Mgmt. Dtr	7153696125	kkortenhof@co.oneida.wi.us
County	Outagamie Co Em Mgmt	Sim	Bruce	Em Mgmt. Dtr	9208325148	simbs@co.outagamie.wi.us
County	Ozaukee Co Em Mgmt	Stolte	William	Em Mgmt. Dtr	2622388398	wstolte@co.ozaukee.wi.us
County	Pepin Co Em Mgmt	Egli	John	Em Mgmt. Dtr	7156728897	pepza@co.pepin.wi.us
County	Pierce Co Em Mgmt	Brown	Gary	Em Mgmt. Dtr	7152736751	gbrown@co.pierce.wi.us
County	Polk Co Em Mgmt	Fabbrini	Richard	Em Mgmt. Dtr	7154859280	richard@co.polk.wi.us
County	Portage Co Em Mgmt	Curtis	Sandra	Em Mgmt. Dtr	7153461398	curtiss@co.portage.wi.us
County	Price Co Em Mgmt	Nez	Nate	Em Mgmt. Dtr	7153392663	pbh@co.price.wi.us
County	Racine Co Em Mgmt	Maack	David	Em Mgmt. Dtr	2626363515	davidm@racineco.com
County	Richland Co Em Mgmt	Schlafer	Lori	Em Mgmt. Dtr	6086478187	schlaferl@co.richland.wi.us
County	Rock Co Em Mgmt	Connors	Shirley	Em Mgmt. Dtr	6087577900	connors@co.rock.wi.us
County	Rusk Co Em Mgmt	Turner	James	Em Mgmt. Dtr	7155322121	jbt258@yahoo.com
County	St. Croix Co Em Mgmt	Colvard	Jack	Em Mgmt. Dtr	7153864718	emergov1@co.saint-croix.wi.us
County	Sauk Co Em Mgmt	Stieve	Timothy	Em Mgmt. Dtr	6083553200	tstieve@co.sauk.wi.us
County	Sawyer Co Em Mgmt	Cody	Brian	Em Mgmt. Dtr	7156342004	emerg.govt@sawyerCogov.org
County	Shawano Co Em Mgmt	Golubic	Steven	Em Mgmt. Dtr	7155266774	emmsteve@co.shawano.wi.us
County	Sheboygan Co Em Mgmt	Johnson	Meleesa	Em Mgmt. Dtr	9204593360	johnsmdj@co.sheboygan.wi.us
County	Taylor Co Em Mgmt	Kahan	Dave	Em Mgmt. Dtr	7157483503	dkahan@co.taylor.wi.us
County	Trempealeau Co Em Mgmt			Em Mgmt. Dtr	7155382311	
County	Vernon Co Em Mgmt	Ackerman	Cindy	Em Mgmt. Dtr	6086375267	cackerman@vernonCo.org
County	Vilas Co Em Mgmt	Miller	Lawrence	Em Mgmt. Dtr	7154793690	
County	Walworth Co Em Mgmt	Williams	Kevin	Em Mgmt. Dtr	2627414616	kwilliam@co.walworth.wi.us
County	Washburn Co Em Mgmt	Wallace	Tim	Em Mgmt. Dtr	7154684730	twallace@co.washburn.wi.us
County	Washington Co Em Mgmt	Schmid	Robert	Em Mgmt. Dtr	2623354399	degrob@co.washington.wi.us
County	Waukesha Co Em Mgmt	Malueg	James	Em Mgmt. Dtr	2625487580	jmalueg@waukeshaCo.gov

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
Co	Waupaca Co Em Mgmt	Carlin	Andrew	Em Mgmt. Dtr	7152584464	acarli@co.waupaca.wi.us
Co	Waushara Co Em Mgmt			Em Mgmt. Dtr	9207870412	
Co	Winnebago Co Em Mgmt	Wilmot	Donald	Em Mgmt. Dtr	9202364894	dwilmot@co.winnebago.wi.us
Co	Wood Co Em Mgmt	Kreuser	Steve	Em Mgmt. Dtr	7154218500	skreuser@co.wood.wi.us
Co	Wood Co Communications	Klopstein	Tim	Communications Dtr	7154218417	tklopstein@co.wood.wi.us
Local	WI Police Chiefs -C/T Committee	Resnick	Bruce	Co-Chair	4143518800	chief@village.bayside.wi.us
Local	WI Police Chiefs -C/T	Running	Peter	Co-Chair	9205829944	winneconnepd@cji.net
Local	Wisc State Firefighters' Assoc	Krause	Steve	Dtr	2628593004	krause@wi-state-firefighters.org
Local	Wisc State Fire Chief's Assoc	Tveit	Keith	President	7156827052	ktveit@coawi.org
Co	Langlade Co Sheriff	Henricks	Brad	Sergeant	7156276411	bhenricks@co.langlade.wi.us
Private	Motorola, Inc.	Fleege	Drake			drake.fleege@motorola.com
Private	Baycom, Inc.	Morse	Michael			morsem@new.rr.com
Private	Baycom, Inc.	Hiltsley	Reid			rhiltsley@baycominc.com
Co	Marinette Co Sheriff	Evancheck	Matt		7157327600	mevancheck@marinetteCo.com
Private	Communications Service, Inc.	Dillon	Pat		6082417700	pdillon@rfstore.com
Private	Communications Service, Inc.	Dubberstein	Steve			steve@rfstore.com
Private	RW Management Group, Inc.	Roemer	Jeff			jroemer@RWManagementGroup.com
Local	Green Bay DPW	Frailing	Randall			randyfr@ci.green-bay.wi.us
State	Dept. of Health & Family Srv	Wittkamp	Paul	EMS Comm. Coord.		wittkp@dhfs.state.wi.us
Co	Marathon Co Sheriff	Wisler	Alan	Comm Tech.		ajwisler@mail.co.marathon.wi.us
Co	Shawano Co Sheriff	Thorpe	Gerald			law506@co.shawano.wi.us
Co	Adams Co Sheriff	Kroetz	Mike		6083393304	
Local	Adams Police Dept.	Gold	James			adamspd@cji.net
State	Wisconsin State Patrol/BOC	Ohnstad	Jeffrey	Engineer	6082662286	jeffrey.ohnstad@dot.state.wi.us
State	Wisconsin State Patrol/BOC	Verhyen	John	Chief Engineer	6082673573	john.verhyen@dot.state.wi.us
Private	M/A-COM	Adolf	Dave	Dist. Sales Manager	6302936707	adolfda@tycoelectronics.com
Co	Juneau Co Sheriff	Cottingham	Timothy			Rdcapt@co.juneau.wi.us
Co	Pierce Co Sheriff	Ducklow	Doug			dducklow@co.pierce.wi.us
Co	Pierce Co Sheriff	Knoll	Mike			mknoll@co.pierce.wi.us
Private	Motorola, Inc.	Sharp	Larry			larry.sharp@mot.com
Private	Northway Communications	Pagenkopf	Scott			scott@northwaycom.com

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
Local Co	Green Bay Fire Dept.	Rogers	John			johnro@ci.green-bay.wi.us
Co	Forest Co Sheriff	VanCleve	Ken			vancleve@co.forest.wi.us
Co	Portage Co Sheriff	Graettinger	John			graettij@co.portage.wi.us
Co	Portage Co Sheriff	Keener	John			keenerj@co.portage.wi.us
Local	Sheboygan Fire Dept.	Zeier	Mark			mzeier@ci.sheboygan.wi.us
Private	Motorola, Inc.	Laseke	Lori			lori.laseke@motorola.com
Co	Clark Co Sheriff	Parker	Jeff			jeff.parker@co.clark.wi.us
Co	Brown Co Em Mgmt	Konopacki	John			cs@co.brown.wi.us
Co	Brown Co Public Safety Comm.	Carlson	Karen			carlson_ka@co.brown.wi.us
Co	Brown Co Public Safety Comm.	Tellock	Dave			tellock_dl@co.brown.wi.us
State	Wisc Education Comm Board	Andrewjesk	Dean			dandrewj@ecb.state.wi.us
Local	Green Bay Police Dept.	Meadowcroft	Steve			steveme@ci.green-bay.wi.us
Private	Baycom, Inc.	Cooney	Tim			twowaysales@cs.com
Local	Green Bay Police Dept.	Ebel	Paul			ebelp@gbpolice.org
Co	Vilas Co Sheriff	Peske	Gary			gapesk@co.vilas.wi.us
Private	PSC Alliance, Inc.	Leack	Dave			dave.leack@psc Alliance.com
Co	Iowa Co Sheriff	Sporle	Steve			steve.sporle@iowaCo.org
Co	Oneida Co Sheriff	Hoffman	Jeff			jhoffman@co.oneida.wi.us
Co	Vilas Co Sheriff	Fath	Joe			jofath@co.vilas.wi.us
State	Wisconsin State Patrol/BOC	Guse	Carl	Frequency Coord.	6082673573	carl.guse@dot.state.wi.us
State	Dept. of Natural Resources	Bucklew	Rick			richard.bucklew@dnr.state.wi.us
Out of State	Region 21 Michigan	Turner	Joseph	Chair		jturner@michiganpropertytax.com
Out of State	Region 22 Minnesota	Pott	Steve	Chair		steve.pott@co.washington.mn.us
Out of State	Region 15 Iowa	Hester	Rich	Chair		richhest@netins.net
Out of State	Region 13 Illinois	Ward	TJ	Chair		wardt@apco911.org
Out of State	Region 54 SLM	Carter	Bill	Chair		bcarter@cityofchicago.org
Federal	Federal Communications Commission	Alford	Joy			jalford@fcc.gov
Out of State		Funk	David			dafunk@du.edu
Out of State		Devine	Steve			devins@mshp.state.mo.us
Private	M/A-COM	Speidel	Bob			speidelbo@tycoelectronics.com

Agency Type	Agency Name	Last Name	First Name	Title	Work Phone	E mail
Private	Motorola, Inc.	Rinehart	Bette			c18923@motorola.com
Private	Motorola, Inc.	Eierman	David			david.eierman@motorola.com
Private	APCO Magazine	Edwards	Toni			edwardst@apco911.org
Private	Radio Resource Magazine					edit@radioresourcemag.com
Private	MRT Magazine	Knupp	Kristi			kknupp@primediabusiness.com
Tribal	Mohican Nation	Micik	Mike		7157934809	public.safety@mohican.com
Federal	Federal Bureau of Investigation	Brethorst	Bill			billbrethorst@hotmail.com
Local	Mountain, Town of	Uhlenbrauck	Debra	Clerk/Treasure		debclerk@ez-net.com
Co	Wood Co	Klopstein	Timothy	Radio Technician		tklopstein@co.wood.wi.us

Appendix C: ATTENDANCE:

LAST NAME	FIRST NAME	ORGANIZATION	03 MAY	03 JUNE	03 AUG	03 SEPT	03 NOV	04 JAN	04 JUNE	04 SEPT	05 APR	05 MAY	06 MAY
Adler	Gary	DNR	X						X				
Adolf	Dave	M/A-Com	X		X	X							
Anderson	Jim	M/A-COM						X	X				
Andrewjeski	Dean	ECB	X										
Augedahl	Bob	Tri-State Ambulance								X			
Behrens	Timothy	FBI – Milwaukee					X						
Biese	Joe	Nielson Communications			X								
Blencoe	Alan	La Crosse EDC								X			X
Carlin	Andrew	Waupaca County EM					X						
Carlson	Karen	Brown County PSC	X		X	X		X	X	X	X	X	
Cooney	Tim	Baycom	X										
Cottingham	Tim	Juneau County SO	X										
Devine	Steve	Missouri State Patrol					X						
Dillon	Pat	Communications Service	X		X	X	X			X	X		
DiBenedetto	Frank	Motorola											
Dickinson	Sally	Appleton PD										X	X
Dubberstein	Steve	Communications Service	X								X	X	
Ducklow	Doug	Pierce County SO	X										
Ebel	Paul	Green Bay PD	X										
Engel	Erik	Wood County PSC											
Evancheck	Matt	Marinette County SO	X										
Fath	Joe	Vilas County SO	X										
Fleege	Drake	Motorola	X		X				X	X	X		X
Frailing	Randy	City of Green Bay DPW	X		X		X	X	X	X	X	X	
Gold	James	Adams PD	X										
Gossen	Carrie	Door County SO											
Graettinger	John	Portage County SO	X										
Guse	Carl	Wisconsin State Patrol	X		X	X	X	X	X	X	X	X	X
Heimke	Nancy	LaCrosse County PSC											X
Heschke	Gary	Waupaca County SO					X			X			
Hiltsley	Reid	Baycom	X										
Hinich	Mark	Communications Service			X								
Hoffman	Jeff	Oneida County SO	X										
Huettl	Teresa	Forest County 911 Center	X										
Irlbech	Steve	Dataradio											X
Janisch	Peter	Grant County SO				X							
Keener	John	Portage County SO	X										
Kesler	Keith	Douglas County EM								X			
Klopstein	Tim	Wood County PSC					X	X					
Knoll	Mike	Pierce County SO		X									

LAST NAME	FIRST NAME	ORGANIZATION	03 MAY	03 JUNE	03 AUG	03 SEPT	03 NOV	04 JAN	04 JUNE	04 SEPT	05 APR	05 MAY	06 MAY
Kochevar	Roger	MN DOT							X			X	
Konopacki	John	Brown County EM		X									
Kroetz	Mike	Adams County SO		X									
Ladron	Bruce	Franciscan Kemp Healthcare								X			
Laseke	Lori	Motorola		X									
Leack	Dave	PSC Alliance, Inc		X									
Loether	Mark	Monroe County				X							
Lyshek	David	Edge Consulting									X		
Marks	Dale	Dodge County Sheriff									X		
McCarty	Al	Brown County PSC									X		
Meadowcroft	Steve	Green Bay PD		X									
Menches	Paul	Onalaska Fire Dept								X			
Morse	Michael	Baycom		X									
Nack	Robert	Kaukauna Fire Department			X								
Nielson	Rick	Bay Electronics			X								X
Ohnstad	Jeff	BOC		X	X	X	X		X				
Pagenkopf	Scott	Northway Communication		X									
Pagenkopf	Don	Northway Communication			X								
Parker	Jeff	Clark County SO		X									
Peske	Gary	Vilas County SO		X									
Peterson	David	Waushara County SO											
Plaza	Jason	Marathon County SO						X					
Pointon	Brad	Pointon Communications			X	X							
Pott	Steve	Washington County, MN							X				
Raab	Philip	Sauk County EM			X								
Rawson	Shannon	Kenosha County Sheriff									X		
Reid	Craig	PacketHop									X		
Reinfeldt	Jan	Sheboygan PD											X
Repphun	Linda	Sheboygan PD											X
Roemer	Jeff	RW Management Group		X									
Rogers	John	Green Bay Fire Department		X	X	X	X	X	X		X		
Running	Pete	Winneconne PD		X									
Rusch	Paul	Calumet County SO					X						
Schuelke	Mary	Outagamie County SO										X	X
Sepic	Frank	Enforcer Technology			X	X							
Schreiner	Russ	Sheboygan PD											X
Sharp	Larry	Motorola		X	X	X			X				
Simenson	Gary	Town of Campbell								X			
Sporle	Steve	Iowa County SO	X										
Sturdevant	Eric	Ho-Chunk Tribal Security				X							

LAST NAME	FIRST NAME	ORGANIZATION	03 MAY	03 JUNE	03 AUG	03 SEPT	03 NOV	04 JAN	04 JUNE	04 SEPT	05 APR	05 MAY	06 MAY
Szczepaniez	Frank	Oconto County Sheriff						X					
Telleck	Dave	Brown County PSC	X										
Terry	Andrew	MN DOT										X	
Thompson	Michael	LaCrosse County PSC											X
Thorpe	Jerry	Shawano County SO	X		X							X	
Treml	Joe	Kewaunee County SO			X								
Unger	Glenn	Wisconsin State Patrol					X						
VanCleve	Ken	Forest County SO	X										
Verhyen	John	Wisconsin State Patrol	X		X	X		X			X	X	
Victorson	Jan	Bayfield County EM									X		
Warrington	Warren	Menominee Tribal Police					X						
Weber	David	Kenwood Communications			X								
Wisler	Alan	Marathon County SO	X		X	X	X	X	X	X		X	X
Wittkamp	Paul	State EMS Communications	X		X	X		X		X	X	X	
Wohlferd	Alan	WEM			X	X		X	X				

Appendix D: MEETING ANNOUNCEMENTS:

REGION 45 (WISCONSIN) 700 MHz PLANNING COMMITTEE FIRST MEETING NOTICE

FROM CARL GUSE.....

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its first meeting will be held on May 1, 2003 at 10:00 am at the Wisconsin State Patrol District 4 headquarters located at 2805 Martin Ave, Wausau, WI (southwest corner of Hwy NN and I-39).

The purpose of the meeting is to:

1. Establish a regional review plan committee,
2. Elect a chairman,
3. Establish procedural rules,
4. Review plan elements,
5. Review NCC progress, and
6. Form work groups to develop the regional plan.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Carl Guse, Convenor
Region 45 700 MHz Regional Planning Committee
Bureau of Communications
POB 7912
Madison WI 53707-7912
608-266-2497
608-267-4495 fax
carl.guse@dot.state.wi.us

Please pass this on to anyone that may be interested.

This first meeting notice also appeared in the March 7, 2003 WISCONSIN LAW ENFORCEMENT BULLETIN and the April 2003 PUBLIC SAFETY COMMUNICATIONS.

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES SECOND MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its second meeting will be held on June 4, 2003 at 10:00 am at the Oneida Public Safety Building, 2783 Freedom Road, Oneida, WI, west of Green Bay.

Directions are: from USH 41 follow STH 172 westbound until the last street before STH 54 (Freedom Rd.), turn left (south-the only way that you can go). From STH 54 east, turn east onto STH 172 and take the first right. The police department is approximately 3/4 miles on the right side of the street, right after the cemetery on the hill.

This meeting will include:

- An educational presentation on 700 MHz planning issues
- Approval of bylaws and rules of order
- Distribution planning materials
- Formation of subcommittees

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7612
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES THIRD MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its third meeting will be held on Thursday, August 7, 2003 at 10:00 am at the HoChunk Casino complex, S3214A Highway 12, Baraboo. This meeting is being hosted by Sauk County Emergency Management. If you'll be reserving a room (on your own), contact Tim Stieve at tstieve@co.sauk.wi.us, so that he can block out a group.

Directions are: On I90/94, proceed to exit #92, Highway 12. Exit on Highway 12 and go south approximately 2 miles. The HoChunk complex will be on your left.

This meeting will include:

- Initial planning meeting for all newly formed sub-committees.
- Distribution of adopted bylaws.
- State Interoperability Plan update.
- 4.9 GHz update.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FOURTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its fourth meeting will be held on Thursday, September 4th, 2003 at 10:00 am at the Wisconsin State Patrol District 3 Headquarters, Fond du Lac.

The District 3 building is located on the west frontage road of Hwy 41 just north of Hwy 151.

This meeting will include:

- Sub-committee planning time for the newly formed 4.9 ghz, Implementation, Technical, and Interoperability sub-committees.
- Presentation by Stephen Devine regarding review of the Missouri region 24 RPC plan.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FIFTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its fifth meeting will be held on Thursday, November 6th, 2003, at 10:00 am at the City of Wausau Park Department office, 212 River Drive in Wausau.

River Drive is located in downtown Wausau, east of the river, between Hwy 52 and East Thomas St.

This meeting will include sub-committee planning time for the newly formed 4.9 ghz, Implementation, Technical, and Interoperability sub-committees.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum

needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES SIXTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its sixth meeting will be held on Thursday, January 22nd, 2004, at 10:00 am at the City of Wausau Park Department office, 212 River Drive in Wausau.

River Drive is located in downtown Wausau, east of the river, between Hwy 52 and East Thomas St.

This meeting will include sub-committee planning time for the Implementation, Technical, and Interoperability sub-committees.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES SEVENTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its seventh meeting will be held on Thursday, June 17th, 2004, at 10:00 am at the La Crosse County Sheriff Department at 333 Vine St, La Crosse. The meeting will be held in the training room.

From I-90 westbound, take exit 3, highway 53 south. Stay on highway 53 south to Vine St, downtown La Crosse. Vine St is just south of La Crosse St.

This meeting will include sub-committee planning time for the Implementation, Technical, and Interoperability sub-committees.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES EIGHTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that its eighth meeting will be held on Tuesday, September 28th, 2004, from 10:00 AM to 12:30 PM. The meeting will be held at the Portage County Sheriff Department, Stevens Point, in the training room. The Sheriff Department is located at 1500 Strongs Ave, south of Hwy 10 and west of Business 51.

This meeting will include a presentation from PacketHop, Inc. on 4.9 ghz solutions and also review time for the final draft version of the region 45 700 MHz plan.

Region 45 will be offering a presentation at the WI NENA conference immediately following the meeting at 2:45 PM.

The WI NENA conference is being held at the Holiday Inn Convention Center in Stevens Point. The Holiday Inn is located at 1501 Northpoint Drive, at the corner of Northpoint and Business 51, just south of I-39 exit 161.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES NINTH MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that it's annual meeting will be held on Wednesday, April 13th, 2005 from 10:00 AM to 1:00 PM. The meeting will be held at the Wisconsin State Patrol Dist 3 headquarters in Fond du Lac. The Facilities are on the Hwy 41-west frontage road, just north of Hwy 151.

The meeting will include the review of the region 45 plan and feedback from adjacent regions, an update on 4.9 GHz activities, 700 MHz status with TV stations and the FCC, and a product demonstration by Proxim Wireless.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES SPECIAL MEETING

The Region 45 (Wisconsin) 700 MHz Public Safety Planning Committee announces that a special meeting will be held on Wednesday, May 18th, 2005 from 1:00 PM to 3:00 PM. The meeting will be held at the Portage County Annex Building, 1500 Strong's Avenue, in Stevens Point.

This special meeting will include an election for the position of chairperson, along with an opportunity for review of the Region 45 700 MHz plan, currently out to the adjacent regions in draft form.

The Region 45 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in Wisconsin may utilize these frequencies. It is essential that participants be representative of all eligible public safety providers in order to ensure that your agencies' future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs. Vendors are encouraged to attend as non-voting members and serve as a resource to the committee.

Region 45 encompasses the State of Wisconsin except for Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha Counties.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band within Region 45 should plan to attend. For further information, please contact:

Karen A. Carlson
Region 45 700 MHz Regional Planning Committee Chair
Brown County Dept of Public Safety Communications
307 S Adams St
Green Bay WI 54301-4582
920-448-7628
carlson_ka@co.brown.wi.us

**REGION 45 (WISCONSIN) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE
INTRODUCTION AND INVITATION TO GREAT LAKES INTER TRIBAL COUNCIL**

Governing Council for the following Wisconsin tribes:

Bad River Band of Lake Superior Chippewa Indians
Lac Courte Oreilles Band of Lake Superior Chippewa Indians
Lac du Flambeau Band of Lake Superior Chippewa
Red Cliff Band of Lake Superior Chippewa
Sokaogon Chippewa Tribe (Mole Lake)
St. Croix Chippewa Tribe
Forest County Potawatomi Community
Oneida Nation
Ho-Chunk Nation
Stockbridge-Munsee Indians of Wisconsin
Menominee Tribe of Wisconsin
Lac Vieux Desert Tribe of Michigan

Carol Wright
Program Coordinator, GLITC
PO Box 9/2932, STH 47 N
Lac du Flambeau, WI 54538

July 15, 2004

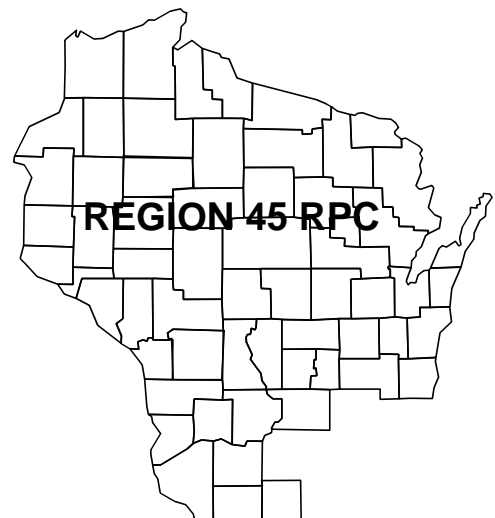
Dear Carol,

I've talked with you recently, as well as Derek and Dwayne, about some of the activities of the Region 45 RPC. I'd like to be able to make this information as accessible as possible to the GLITC and all of its members. Region 45 covers the entire state of Wisconsin except for the counties of Dane, Dodge, Jefferson, Kenosha, Milwaukee, Ozaukee, Racine, Rock, Walworth, Washington, and Waukesha.

In 1998, the FCC allocated a portion of the 700 MHz spectrum for use by any public service agency. All eligible public safety providers within the region are eligible to use these new frequencies.

The Region 45 RPC (Regional Planning Committee) has been active in drafting a plan on how these new public safety radio frequencies will be utilized in our state.

Obviously to do this as thoroughly as can be, we need the input from as many communications stakeholders as possible.



Therefore, I am asking that you please forward this note on to the appropriate contacts for all of your members. If you are able to distribute this to your membership, please copy me on your distribution.

The next meeting of the Region 45 RPC will be in September. The main thrust at that meeting will be to review the draft copy of our plan to date.

For further information on this process, you and your members might want to visit the following website:

<http://wireless.fcc.gov/publicsafety/700MHz>

Thanks much for your help, Carol. I'll keep you copied as new meeting notices and other information become available.

Sincerely,

Paul Wittkamp,
Region 45 Secretary,
Communications Coordinator
Wisconsin DHFS, EMS Section
1 W. Wilson St. Room 118
Madison, WI 53701
Direct (608) 261 9306
Fax (608) 261 6392
wittkpv@DHFS.state.wi.us

Appendix E: MEETING MINUTES:

Region 45 Wisconsin 700 MHz Regional Planning Committee May 1, 2003 meeting

The initial meeting of the Region 45 Wisconsin 700 MHz Regional Planning Committee was called to order at 1005 on Wednesday, May 1, at Wisconsin State Patrol District 4 in Wausau, WI.

In his role as convenor, Carl Guse, Wisconsin State Patrol BOC, called the meeting to order. Carl indicated that going forward, the Region 45 RPC actions will be to plan and manage 700 MHz resources, and is not about forming a state wide system.

After introductions were complete, Bob Speidel with M/A-Com, Tyco Electronics, gave a presentation on the history and goals of the 700 MHz effort to date along with some of the technical and political hurdles that lie ahead.

Elections were held and approved unanimously with the following results:

Chair: Karen Carlson, Brown County Public Safety Communications
Vice Chair: Randy Frailing, City of Green Bay Communications
Secretary: Paul Wittkamp, State of Wisconsin EMS Communications
Treasurer: Kathy Edwards, Winnebago County Sheriff

It was moved, seconded, and approved to reimburse Carl Guse \$ 769.42 in expenses for CAPRAD database training. Carl Guse stated that the Region 45 Committee currently has \$ 2,500 obtained from a planning grant distributed by the NPSTC. This money is currently being held by the Wisconsin APCO chapter until the treasurer takes office.

John Verhyen, State of Wisconsin BOC, said that he would like to see BOC input considered as a resource, but would prefer the officers, management and operation of the Region 45 planning committee to come from the main body of the group. He also reviewed plans for the State Interoperability Executive Committee (SIEC). The goal is to have members on this panel from State administrator level positions, as some "horsepower" may be necessary.

The next meeting is tentatively set for Wednesday, June 6th, at 1300 in Green Bay, but may be changed to allow a schedule conflict to be resolved that the Chair may have.

The meeting was adjourned at 1220.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
June 4, 2003 meeting**

The June 4th, 2003 meeting of the Region 45 Wisconsin 700 MHz Regional Planning Committee was called to order at 1010 by Karen Carlson, Chairperson, and was held at the Oneida Public Safety Building in Oneida, WI. 24 were in attendance.

After introductions, the minutes of the initial May 1st meeting were read by Paul Wittkamp, Secretary, and were approved as read.

Karen mentioned that vendors, as non-voting members, did not have motion ability but were highly valued for their respective input to the group.

David Eierman with Motorola, gave a presentation regarding 700 MHz efforts and overviewed the following topics:

NCC status and accomplishments.

24 MHz allocation overview and wideband / narrowband layout.

700 MHz general use spectrum.

Application processes and filing.

Frequency coordination and interference issues.

700 MHz spectrum timeline and migration deadlines.

TV blockage issues.

Congressional legislation regarding clearing the 63, 64 and 68, 69 television channels.

After the presentation, Karen distributed and overviewed the proposed bylaws for Region 45. The following changes were made:

Quorum needs were left flexible.

Location for the annual meeting was left open.

Rules, Membership, and Financial sub-committees will be a function of the executive committee.

A motion to accept the bylaws, with these changes, was made by John Rogers. Robert Nack seconded. The motion passed and the bylaws were accepted.

Karen then overviewed the remainder of the subcommittees and their goals, then asked the floor for volunteers for these sub-committees. The following list shows the sub-committees and the meeting attendees involved:

Interoperability subcommittee:

Drake Fleege, John Rogers, Al Wohlferd, Frank Sepic, Jerry Thorpe

Technical / Research subcommittee:

Drake Fleege, Frank Sepic, Alan Wisler, John Verhyen

Implementation subcommittee:

Pat Dillon, Dave Adolf, John Verhyen, Carl Guse

4.9 GHz subcommittee:

Alan Wisler, John Rogers, Randy Frailing, Paul Wittkamp

Those in attendance then suggested that the committee list get sent to the master email distribution list for further involvement from those who were not at the meeting.

The next RPC meeting will have time for these subcommittees to meet and select their own Chairs.

The RPC meetings for the rest of the year and early 2004 will be held on the first Thursday of each month. The only exception being July, when the normally scheduled meeting will be cancelled. Volunteers were asked to host future meetings, with the goal of having future meetings in various parts of the State to make them as accessible as possible to the largest group. John Verhyen suggested coordinating these with future WICORTS meetings. The FCC needs 60 day notification of meeting schedules.

Carl Guse mentioned that there may be further CAPRAD training opportunities available at the APCO conference coming up in August at Indianapolis.

Robert Nack made a motion to adjourn, and was seconded by John Rogers. The meeting was adjourned at 1155.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
August 7, 2003 meeting**

The August 7th, 2003 meeting of the Region 45 Wisconsin 700 MHz Regional Planning Committee was called to order at 1010 by Karen Carlson, Chairperson, and was held at the Ho-Chunk Casino facilities in Baraboo, WI. 16 were in attendance.

After introductions, a motion to approve the minutes of the June 4th meeting was made by John Rogers and seconded by Alan Wisler. The motion carried and the minutes were approved.

John Verhyen, WSP BOC, gave a review of the recent WICORTS meeting held in Rhinelander. Items reviewed by John included the grant application submitted by Pierce County, and their interaction with their surrounding counties regarding the their pilot project. The award for this grant could be issued as soon as September 15th.

The request for proposal, RFP-3101, submitted by the Office of Justice Assistance, was also highlighted. John mentioned this RFP, which involves communications interoperability for the State, is sectioned into three parts that the winning vendor will need to consider; assessment, standards, and implementation.

Alan Wisler suggested that time for subcommittee work be allotted at each regular meeting.

The plans for the next meeting were discussed. It was decided to hold the next meeting on the normal date, the first Thursday of the month, in this case, September 4th. The meeting will be at 10 AM and will be held at the District 3 Wisconsin State Patrol Headquarters in Fond du Lac, WI. This meeting will include a presentation by Stephen Devine, Region 24 Chairperson, to overview the Region 24 (Missouri) 700 MHz plan.

The region 5 (S CA) plan, region 22 (MN) draft, region 24 (MO) plan, and region 54 (S Lake Michigan) draft were discussed and made available for review.

At 1045, the subcommittees broke out and the various subcommittee leads were chosen:

Interoperability = Al Wohlferd

Technical / research = Alan Wisler

Implementation = Carl Guse

4.9 GHz = Paul Wittkamp

The meeting concluded at 1150.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
September 4, 2003 meeting**

The fourth meeting of the region 45 RPC was held at the WSP District #3 headquarters in Fond du Lac, and was called to order at 10:10 a.m. An introduction of members was conducted since there were several new members present.

Stephen Devine from region 24 RPC, Missouri, gave a presentation on their plan to date. Highlights of the presentation included:

- NCC document
- State License
- Channel Allotments
- Templates of the different counties
- 700 MHz, how has it been divided for use.
- 8 (minimum) through 32 interoperability channels

Mr. Devine conducted a review of the CAPRAD (Computer Assisted Pre-Coordination Resource and Database System). This can be viewed at <http://caprad.nlectc.du.edu>. There is a work book for the regions and it allows communications between the regions. With the implementation of 700 MHz, there will be a manufacturer's rule that a minimum of eight (8) Interoperability channels will be slaved into portable and mobile radio units.

Mr. Devine brought up Marathon County as an example to display how the channels are pre-established. There are 14 general use channels which can be moved by the RPC or the county with RPC permission. Moving frequencies requires caution to ensure the 68 mile separation rules.

Discussion was had regarding maximum voice path mapped as 25 KHz to allow for orphan channels. There will no longer be high site systems. General use channels must include designated data channels.

Discussion was had regarding the FCC requirement of each region have an SIEC. If State does not designate one, Region 45 RPC must designate a sub-committee.

Each region plan must include a procedure for requesting spectrum allotment within the regional plan. Determine whether to use a regional planner, assign RPC CAPRAD authority to approve everything or limited. Giveback channels also need to be addressed in the plan. Recommended if it is to replace an existing system, that channels of the old system must be given back to FCC for re-distribution. Leave this on a case by case basis evaluation but that it will be considered. Inter and Intra Agency Dispute Resolution must be addressed. (Refer to page 11 in Missouri Plan) Other technical topics discussed.

The RPC may want to consider re-labeling all channels from 39 MHz to 800 MHz. There is hope that the FCC may adopt this to create consistency. Can designate channels for colleges, stadiums and any other large event centers. Make the plan a living document. NPSTC will be providing a national channel pattern that may help regions address border issues.

Next meeting will be in two months and may be scheduled to be longer to maximize people's travel time. Executive committee will meet within the next month to layout responsibilities to each sub-committee and the next meeting will be a working meeting with some plan information already developed to add to.

The next meeting will be November 6, 2003 in Wausau. The meeting will be at the City of Wausau Park Department office on River Drive.

The meeting was adjourned at 1:05 PM.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
November 6, 2003 meeting**

The fifth meeting of the region 45 RPC was held at the City of Wausau Parks Department in Wausau, WI., and was called to order at 10:15 a.m. An introduction of members was conducted since there were several new members present.

The agenda for this meeting was approved, and the minutes from the September 4th meeting were approved as read.

John Verhyen spoke briefly on the status of the formation of the State SIEC committee. He thought the SIEC should be formed with County and Tribal level people and that input from the State should be in an advisory capacity only.

John indicated that the SIEC should be formed of administrators with decision making capacity and funding sources to back them up. He also thought the committee should have a good mix of members from all of the various public safety disciplines, PD, fire, EMS, highway, municipal, etc.

John also mentioned that the Federal Government, regarding Homeland Security monies, would look favorably at our State as we work towards the formation of an SIEC in this way. Wisconsin has stated to the FCC that the SIEC will be formed, and by doing this, our State is following through.

The SIEC should also have the various public safety associations (Fire Chiefs, Sheriff, etc.) involved as well for additional clout.

The effort towards the SIEC formation should help with future frequency interoperability and coordination, too, and help eliminate any local or county level “pockets” when considering new radio systems.

John Verhyen made a motion, Alan Wisler seconded, and motion carried, to have Karen Carlson, Region 45 Chair, draft a letter to the Governor in support of the prompt formation of the SIEC. This letter will in turn be sent to all County level RPC members and associations, and will be drafted within two weeks.

The treasurer's report indicates that the Region 45 RPC has a current balance of \$1,730.58. Our RPC could fund CAPRAD training for members, but those members should be prepared to function in this capacity if trained in this manner.

Carl Guse discussed the status of plans submitted to the FCC from other regions. It was suggested that a “resource list” be formed regarding 700 MHz plans from all other regions, along with their status and submission dates.

Information regarding our region 45 RPC will be posted and updated on the APCO Wisconsin Chapter website.

Alan Wisler suggested that the NPSTC CAPRAD frequency web link should be shared with the general membership.

Carl Guse will report back at the next meeting regarding the combination of our RPC with the NPSTC 800 MHz planning group at the next annual meeting in January. The Region 45 bylaws currently indicate the annual meeting will be held in April. It was suggested that future leadership and nomination activities could be combined in this way. This combination could help, too, as the pending Nextel and 800 mhz issues will have a great impact on the 800 MHz public safety community as a whole with possible frequency moves in the future.

Alan Wisler moved, John Rogers seconded, and motion carried to have the Region 45 RPC bylaws changed to reflect that the next meeting to be held in January will be the annual meeting, and will be on the same day as the NPSPAC meeting, January 22nd.

The group broke into subcommittees. Jim Anderson and Randy Frailing will be new members on the implementation subcommittee.

The group broke for lunch at 12:15 PM, resumed subcommittee work at 1:00 PM, looked at the NPSTC 700 MHz database online.

The meeting was adjourned at 2 PM.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
January 22, 2004 meeting**

The sixth meeting of the region 45 RPC was held at the City of Wausau Parks Department in Wausau, WI., and was called to order at 10:13 a.m. This meeting also served as the annual meeting as well. This meeting time and date was changed from the original April date to coincide with the annual 800 MHz meeting. The by-laws were modified to reflect this change.

An introduction of members was conducted, since there were several new members present, including two representatives from Region 22, Minnesota. The following members were in attendance:

Gary Adler, WI DNR; Jim Anderson, M/A-Com; Karen Carlson, FoxComm; Drake Fleege, Motorola; Randy Frailing, City of Green Bay DPW; Carl Guse, WI State Patrol; Tim Klapstein, Wood County Comms Dept; Roger Kochevar, MN DOT and Region 22; Jeff Ohnstad, WI State Patrol; Steve Pott, Washington County, MN, Sheriff Dept. and Region 22; John Rogers, Green Bay Fire Dept.; Larry Sharp, Motorola; Alan Wisler, Marathon County Sheriff Dept.; Alan Wohlferd, WI Emergency Management.

Karen Carlson, Chairperson, mentioned the draft of the Region 45 plan was progressing. The draft should be finished after receiving input at the next Region 54 meeting, set for March 16th. The current thought is the plan should be ready to submit to the FCC by June.

The next meeting date for the Region 45 RPC will remain flexible for a time, based on the status of the plan.

Karen Carlson reported on the status of the draft letter to be submitted to Governor Doyle urging the formation of a Wisconsin SIEC (State Interoperability Executive Committee). This letter has been forwarded to the Region 45 membership, and the Badger Sheriff Association for input.

Randy Frailing passed along his thanks to Karen for her work in drafting this letter and working with the issue.

Carl Guse reported on the progress of the implementation subcommittee. He passed out draft copies of the implementation subcommittee's portion of the plan, which were discussed. Most of this was based on the work done and plan created by Region 24, Missouri. Carl indicated that interoperability issues will be address by the Wisconsin SIEC if formed. Otherwise, they will be addressed by the Region 45 RPC.

The question of amendments to the plan once approved by the FCC was discussed. Will formal FCC approval be needed for each change, or will the plans be created as a living document?

The two Minnesota representative, Steve Pott and Roger Kochevar, shared their views on orphan channels and allocation of the general use spectrum. Steve and Roger indicated that their plan provides for licensing 25 KHz blocks in four 6.25 KHz groups, and that their language for this portion of their plan is not quite as strong as that found in the region 45 plan. They also indicated that the Region 22 plan should be ready for final comment (but not submission) by their next quarterly meeting in April.

General consensus was that data, not necessarily voice, will be the big push for 700 MHz. It was felt that assignment of the general use data channels be done by the individual counties, but that at least one 150 KHz channel be reserved.

A letter from Steve Devine was discussed. This letter favors the formation of a national organization of all 55 700 MHz and 800 MHz RPCs. The letter also asked for support, as Steve Devine wishes to be the head of this organization.

Randy Frailing made a motion to consider this letter, but that we table any action on this until the next meeting. There was no second to the motion.

Karen Carlson made a motion to support the concept of NARPC (National Association of RPCs) and to draft a revision of Steve Devine's letter. This would offer support for the concept but refrain from supporting him as the sole voice on behalf of our region until the development and structure of the NARPC is completed to assure that there is an avenue to voice our opinion and to assure that it is communicated properly. Paul Wittkamp seconded, and the motion carried.

The meeting was adjourned at noon.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
June 17, 2004 meeting**

The seventh meeting of the region 45 RPC was held at the La Crosse County Sheriff Department Law Enforcement Center in La Crosse, WI, and was called to order at 10:05 a.m. by Chairperson Karen Carlson.

An introduction of members was conducted, since there were five new members present, including representatives from the healthcare, hospital, and EMS disciplines.

The following members were in attendance:

Bob Augedahl - Tri-State Ambulance, Al Blencoe - LaCrosse County Communications
Karen Carlson - FoxComm, Pat Dillon - Communications Service, Drake Fleege - Motorola, Randall Frailing - City of Green Bay DPW, Carl Guse - WI State Patrol Communications, Gary Heschke - Waupaca County Sheriff Department, Bruce Ladron - Franciscan Skemp Healthcare, Paul Menches - City of Onalaska Fire Department
Gary Simpson - Town of Campbell Emergency Services, Alan Wisler - Marathon County Sheriff Department, Paul Wittkamp - State of WI EMS Communications

A presentation and review of the latest draft copy of the region 45 RPC plan was presented to the group in attendance for comments and revisions. The bulk of the plan is based on the region 54 work, and many good comments were initiated. A new draft of the region 45 plan will be created based on the comments received and circulated to the entire general membership in the next several weeks. This will be done to ensure that everyone has the opportunity to provide further comment and input.

Karen Carlson is continuing her work on the 4.9 GHz plan.

The treasurer position was discussed with the thought that the WI chapter of APCO can continue to provide this service for the RPC.

It was suggested that interested RPC members take advantage of future CAPRAD training opportunities.

The next meeting date was left flexible but will probably be held in September.

A motion was made and seconded for adjournment, and the meeting was adjourned at 12:55 PM.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
September 28, 2004 meeting**

The eighth meeting of the region 45 RPC was held in two different locations to suit the convenience of some attendees. The first session was at the Portage County Sheriff Department in Stevens Point, and was called to order at 10:10 a.m. This session was closed at 11:45 a.m. The second session was called to order at the NENA Fall Conference in Stevens Point at 2:45 p.m. This session was closed at 3:50 p.m.

The following members from both locations were in attendance:

Karen Carlson - FoxComm, Pat Dillon - Communications Service, Steve Dubberstein - Communications Service, Drake Fleege - Motorola, Randall Frailing - City of Green Bay DPW, Carl Guse - WI State Patrol Communications, Keith Kesler - Douglas County Emergency Management, David Lyshek - Edge Consulting, Dale Marks - Dodge County Sheriff Department, Al McCarty - Brown County PSC, Shannon Rawson - Kenosha County Sheriff Department, Craig Reid - PacketHop, John Rogers - Green Bay Fire Department, John Verhyen - WI State Patrol Communications, Jan Victorson - Bayfield County Emergency Management, Paul Wittkamp - State of WI EMS Communications

Future planning committee structure was discussed and the role the committee will play in license and channel coordination.

The most recent draft copy of the Region 45 RPC 700 MHz plan was reviewed. A few minor changes were made and all in attendance thought the plan represented a good effort.

These changes will be incorporated into the plan and then submitted to adjoining regions for their approval and also posted on CAPRAD.

The current SIEC efforts in the state were overviewed by Chairperson Carlson.

A breakout session at the NENA conference was also presented by the Region 45 executive committee on region 45 RPC efforts to date and the development of the 700 MHz planning efforts in general.

The next meeting was left open, pending status of plan acceptance.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
Annual meeting
April 13, 2005**

The ninth and 2005 annual meeting of the region 45 700 MHz RPC was held at Wisconsin State Patrol Post #3 in Fond du Lac. The meeting was called to order at 10:05 a.m. by Karen Carlson, Chairperson.

The minutes from the last 9/28/04 meeting were read and approved.

Introductions around the room were offered. The following members and guests were in attendance:

Karen Carlson, FoxComm
Sally Dickinson, Appleton Police Department
Steve Dubberstein, Communications Service
Randall Frailing, City of Green Bay DPW
Carl Guse, WI State Patrol Communications
Roger Kochevar, Minnesota Department of Transportation
Mary Schuelke, Outagamie County Sheriff Department
Andrew Terry, Minnesota Department of Transportation
Gerald Thorpe, Shawano County Sheriff Department
Alan Wisler, Marathon County Sheriff Department
Paul Wittkamp - State of WI EMS Communications

The previously announced presentation by Proxim Wireless was not given, as the vendor did not show up for the meeting.

The need to have an election for Chairperson was discussed, as the current chair, Karen Carlson, is resigning. The Region 45 bylaws were reviewed for proper procedure. It was determined that the future chairperson would handle both 700 MHz and 800 MHz groups. Two candidates were introduced, Randy Frailing, City of Green Bay DPW, and Russ Schreiner, City of Sheboygan PD. Election was conducted by paper ballot, with the result being a tie. Due to the tie, Karen will remain as chair until a new election is held during a special meeting to be held in the near future.

Karen Carlson reviewed the status of the Region 45 700 MHz plan. The plan is complete at this point and is waiting for adjacent region sign off for final submission to the FCC. Karen mentioned the FCC has informally said the plan looked good with no further changes needed.

Carl Guse led a discussion regarding wideband 700 MHz data channels and the need and difficulty in determining a standard for this service. The opposition to the current FCC suggested standards by Dataradio was discussed.

The coverage map for TV station WMMF near Mayville was discussed. The circle of protection for this station on ch 68 needs to be better defined to determine where 700 MHz spectrum would be available in the surrounding area.

Paul Wittkamp made a motion, seconded by Carl Guse, for Region 45 to join the National Association of Regional Planning Committees (NARPC). Motion passed. Karen Carlson will write a letter to Steve Devine, NARPC, of our intentions.

The meeting was adjourned by motion at 11:10 a.m.

The date for the special meeting was left open, to be determined.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
Special meeting
May 18, 2005**

The tenth and special meeting of the region 45 700 MHz RPC was held at the Portage County Annex Building in Stevens Point. The meeting was called to order at 1:05 p.m. by Karen Carlson, Chairperson.

Introductions around the room were offered. The following were in attendance:

Alan Blencoe, La Crosse EDC
Karen Carlson, FoxComm
Sally Dickinson, Appleton Police Department
Drake Fleege, Motorola
Randy Frailing, City of Green Bay DPW

Carl Guse, WI State Patrol BOC
Nancy Heimke, LaCrosse County PSC
Steve Irlbech, Dataradio
Rick Nielson, Bay Electronics
Jan Reinfeldt, Sheboygan PD
Linda Rupphen, Sheboygan PD
Russ Schreiner, Sheboygan PD
Mary Schulke, Outagamie County Sheriff
Michael Thompson, LaCrosse County PSC
John Verhyen, BOC
Alan Wisler, Marathon County SO
Paul Wittkamp, State EMS Communications

Karen Carlson reviewed the latest status with the Region 45 700 MHz plan. The plan has been submitted to adjacent regions for concurrence. So far region 45 has verbal Ok from region 54, but nothing written. We are in discussion with region 21. Nothing as of yet from region 11 or region 15.

The minutes from the last 4/13/05 meeting were reviewed and approved.

Carl Guse reviewed the latest information regarding the NARPC. At the last meeting, Region 45 elected to join this group. We now need to supply a Region 45 support letter to NARPC.

Carl Guse led a discussion regarding wideband 700 MHz data channels and the need and difficulty in determining a standard for this service. The opposition to the current FCC suggested standards by Dataradio was discussed.

An election was held for the position of Chairperson. Randy Frailing and Russ Schreiner were candidates. There were no nominations from the floor. Six absentee ballots were received prior to the meeting and were included with the ballot tally during election.

Russ Shreiner won the election.

The meeting was adjourned at 1:20 PM.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

**Region 45
Wisconsin 700 MHz Regional Planning Committee
annual meeting
May 11, 2006**

The eleventh and annual meeting of the region 45 700 MHz RPC was held at the Wisconsin State Patrol Post in Fond du Lac, WI. The meeting was called to order at 10:00 a.m. by Russ Schreiner, Chairperson. Introductions around the room were offered. The following were in attendance:

Frank DiBenedetto, Motorola
Erik Engel, Wood County
Carrie Gossen, Door County Sheriff Dept
Carl Guse, Wisconsin State Patrol
Steve Irlbeck, Dataradio
Rick Neilson, Bay Electronics
Russ Schreiner, City of Sheboygan Police Dept
Mary Schuelke, Outagamie County Sheriff Dept
Alan Wisler, Marathon County
Paul Wittkamp, State DHFS, EMS

The subject of wideband data frequency allocation was discussed in depth. The Region 45 plan does not adequately address the issue of assigning the 48 available 50khz channels. Additional language needs to be added to the Region 45 plan. The panel will look at other regional plans for language; Missouri and Minnesota are two that could be reviewed.

The group agreed to go ahead and submit the Region 45 plan to the FCC as it now exists, and then file an amendment for the wide band additional information.

Al Wisler mentioned the disparity between dispatch CAD systems will add a problem with future data interoperability, and that each county will need at least three 50khz channels.

Steve Irlbeck explained the auto search system and proposed a system of 50 khz and 150 khz channels to make the best use of bandwidth versus coverage distance.

Russ Schreiner proposed that our group research other plans and information from vendors involved in this area. He also suggested that a subcommittee be formed to put together a plan and scope for wideband data usage in the region.

Paul Wittkamp reported on the status of adjacent region concurrences. Our RPC has received concurrence from four of the five adjacent regions, Region 54 being the only one left to follow through. Region 21 is requesting concurrence from our RPC for their plan. The secretary will e mail the Region 45 membership with a soft copy of the Region 21 plan and ask for comments. Hearing none in 30days, our RPC will approve the Region 21 plan.

Carl Guse spoke briefly about standard nomenclature for interop channels. Mutual aid channels were also discussed, along with the appropriate usage of them.

Russ Schreiner discussed 4.9 ghz mesh systems and the RPC's role in future 4.9 ghz planning. As 4.9 ghz systems grow in popularity, our RPC will monitor usage. It was felt that the Region 45 RPC would play a role as a collaborator rather than a coordinator in the future.

The meeting was adjourned at 11:30 a.m.

Respectfully submitted,
Paul Wittkamp,
Region 45 Secretary

Appendix F: INTEROPERABILITY CHANNELS and TECHNICAL PARAMETERS:

Table of Interoperability Channels For Specific Uses/Services ¹

Television Channels 63 and 68

Note: Only Base Transmit Side of Channel Pairs is Shown

CHANNEL SETS	DESCRIPTION	LABEL
<i>Channel 23 & 24</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC51</i>
<i>Channel 103 & 104</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC52</i>
<i>Channel 183 & 184</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC53</i>
<i>Channel 263 & 264</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC54</i>
Channel 39 & 40	Calling Channel	7CALL50
Channel 119 & 120	General Public Safety Service	7TAC55
Channel 199 & 200	General Public Safety Service	7TAC56
Channel 279 & 280	General Public Safety Service (Data Only)	7DATA69
Channel 63 & 64	Emergency Medical Service	7MED65
Channel 143 & 144	Fire Service	7FIRE63
Channel 223 & 224	Law Enforcement Service	7LAW61
Channel 303 & 304	Mobile Repeater	7MOB59
Channel 79 & 80	Emergency Medical Service	7MED66
Channel 159 & 160	Fire Service	7FIRE64
Channel 239 & 240	Law Enforcement Service	7LAW62
Channel 319 & 320	Other Public Service	7GTAC57

Trunking is permitted on the 4 channel sets indicated in Italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidths.

Television Channels 64 and 69

Note: Only Base Transmit Side of Channel Pairs is Shown

CHANNEL SETS	DESCRIPTION	LABEL
<i>Channel 657 & 658</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC71</i>
<i>Channel 737 & 738</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC72</i>
<i>Channel 817 & 818</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC73</i>
<i>Channel 897 & 898</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC74</i>
Channel 681 & 682	Calling Channel	7CALL70
Channel 761 & 762	General Public Safety Service	7TAC75
Channel 841 & 842	General Public Safety Service	7TAC76
Channel 921 & 922	General Public Safety Service (Data Only)	7DATA89
Channel 641 & 642	Emergency Medical Service	7MED86
Channel 721 & 722	Fire Service	7FIRE83
Channel 801 & 802	Law Enforcement Service	7LAW81
Channel 881 & 882	Mobile Repeat	7MOB79
Channel 697 & 698	Emergency Medical Service	7MED87
Channel 777 & 778	Fire Service	7FIRE84
Channel 857 & 858	Law Enforcement Service	7LAW82
Channel 937 & 938	Other Public Service	7GTAC77

Trunking is permitted on the 4 channel sets indicated in Italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidths.

Channel nomenclature and reserving specific channels for first responders (EMS, Fire & Law Enforcement) were subjects of Petitions for Reconsideration to the 4th Report & Order in Docket 96-86. While these Petitions were denied by the FCC for codification into its Rules, the FCC nonetheless recognized the importance of such standardization if it was implemented at the State and/or Region Level.

Only ANSI/TIA/EIA 102 (Project 25) data standard compliant equipment is permitted to use the data channels.

Interoperability Channel Technical Parameters

ANSI/TIA/EIA-102 (Project 25) Common Air Interface

Certain common Project 25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPAC analog Interoperability channels.

Network Access Code

In the Project 25 Common Air Interface definition, the Network Access Code is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the preamble of the Project 25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

Recommendation: Since NPSPAC Interoperability Channels use CTCSS tone 156.7 Hz (5A), use of corresponding NAC code \$61F is recommended for the 700 MHz Interoperability Channel NAC code.

Talkgroup ID

In the Project 25 Common Air Interface definition, the Talkgroup ID on conventional channels is analogous to the use of talkgroups in trunking. In order to ensure that all users can communicate, all units should use the default Talkgroup ID of \$0001.

Manufacturer's ID

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default Manufacturer's ID of \$00.

Message ID

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for unencrypted messages of \$00000000000000000000.

Encryption Algorithm ID and Key ID

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption is prohibited on the Interoperability Calling Channels; all units should use the default Algorithm ID for unencrypted messages of \$80 and default Key ID for unencrypted messages of \$0000. These same defaults may be used for the other Interoperability channels when encryption is not used.

The FCC permits the use of encryption on all Interoperability channels except the two Calling Channels. However, Region 45 has determined that it is in the best interests of Interoperability to NOT allow encryption on any of the channels.

Appendix G: INCIDENT COMMAND SYSTEM:

Incident Command System (ICS)

The Incident Command System (ICS), also increasingly known as the National Incident Management System (NIMS) has been implemented throughout the U.S. and Canadian public safety communities at all levels of government, as well as increasingly among private-sector participants. ICS is an overall incident management program designed for universal application by any public safety entity or group of entities. The objective of this paper is to provide an overview of the basic ICS structure with a focus on communications operations specifically, and to provide recommendations for the implementation of ICS to manage priority access to the 700 MHz band public safety interoperability spectrum.

I. Background

ICS is a comprehensive, modular system designed to provide a systematic, flexible approach to coordinating resources and response to incidents of any size, type, or duration. Although now a comprehensive series of management guidelines designed for a variety of incidents requiring public safety involvement, ICS has its origination in the area of wildfire suppression, prompted by a disastrous series of fires in Southern California in 1970. The U. S. Forest Service thereafter undertook a five-year development effort that led to the design of the Fire-Fighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE) system. ICS applications and users have proliferated since then. In 1980, the FIRESCOPE plan made the transition into a national program called the National Interagency Incident Management System (NIIMS)¹. At that time ICS became the backbone of a wider-based system for all federal agencies with wildland fire management responsibilities. Over the past 20 years ICS has been incorporated into the emergency management plans of numerous other public safety agencies, at all levels of government, throughout North America.

In its 1996 Final Report to the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration addressing public safety requirements before 2010, the Public Safety Wireless Advisory Committee (PSWAC) Interoperability Subcommittee developed its communications needs assessment under the context of ICS. Specifically, the PSWAC determined that ICS was an efficient method of incident command organization and therefore developed its communications recommendations with the expectation that ICS would be implemented by all public safety organizations.

¹ The FIRESCOPE (NIIMS) ICS protocol and terminology became and effectively remain the baseline for all ICS programs. Virtually all ICS programs of any type or scope, and regardless of the size or function of the developing agency, incorporate NIIMS to some extent, and virtually all are consistent with NIIMS. Such programs either cite NIIMS directly, or else incorporate language taken directly from NIIMS. Specifically, the *Communications Unit Leader Position Manual*, ICS-223-5, September 1, 1982, is the primary ICS communications document, and is incorporated by reference in the NIFC, NFA, EMI and other major ICS training curricula.

II. Definitions

The ICS system has been incorporated into a growing number of operational variants or combinations based upon the specific mission or regional focus of the participating entities (e.g. seismic activity, wildfires, large crowds or demonstrations). Such variants include, but are by no means limited to, those developed and/or currently employed by the California Office of Emergency Services (OES), The University of Michigan at Flint (UM–Flint), National Interagency Fire Center (NIFC), the National Wildfire Coordinating Group (NWCG), Federal Emergency Management Agency (FEMA), and Search and Rescue of British Columbia (SARBC). Accordingly, several different ICS training programs have been developed, such as those currently offered by the National Fire Academy (NFA), Emergency Management Institute (EMI) the Standardized Emergency Management System (SEMS), and the NIIMS. In developing these recommendations, ICS publications either contained in or referenced by the NFA training curriculum were employed as a “baseline” reference. However, in regard to the basic structure and terminology, all ICS/IMS programs, including the NFA curriculum, are essentially derived from the original FIRESCOPE model, and thus are substantially consistent.

For the purposes of developing these recommendations, with the exception of the specific communications protocols addressed herein, “ICS” will therefore be used to apply to a generic version of the ICS/IMS management structure, which is generally applicable to all agencies currently employing ICS without regard to specifics developed for a particular purpose, location or focus.

III. Overview

The complexity of incident management, coupled with the growing need for multi–agency and multifunctional involvement on incidents, has increased the need for a single standard incident management system that can be used by all emergency response disciplines.

ICS serves as a management system designed to help mitigate incident risks by providing clear lines of authority, accurate information, strict accountability, planning, and cost–effective operations and logistical support for any incident. An ICS plan can focus on law enforcement, fire suppression, emergency medical services (EMS), or any combination thereof to whatever degree is required. Either individual or multiple agencies can use ICS—and participating entities or assets can be added, augmented, scaled back or dropped entirely at any time prior to or during the incident—either within an individual jurisdiction, or across multiple jurisdictions or regions. This internal flexibility affords both immediate and long–term efficiencies.

ICS can be applied to a wide variety of emergency and non-emergency situations. Some examples of incidents and events that can use ICS include:

- Fires, HAZMAT, and multicasualty incidents
- Multijurisdiction and multi–agency disasters

- Wide-area search and rescue missions
- Planned events; e.g., celebrations, parades, concerts

The key element of ICS is that only one individual will be vested with a particular command and control action, and all command and control functions will ultimately be derived from one central authority.

ICS is organized around five major management activities. **Command** has overall responsibility at the incident or event. It determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy. **Operations** develops the tactical organization and directs all resources to carry out the Incident Action Plan. **Planning** develops the Incident Action Plan to accomplish the objectives. It also collects and evaluates information and maintains status of assigned resources and functions. **Logistics** provides resources and all other services needed to support the organization, to include the coordination and implementation of communications functions. **Finance/Administration** monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance. These five major management activities are the foundation upon which the ICS organization is based, and are applicable to any ICS program or incident regardless of size or type.

The person designated with overall management authority is the Incident Commander (IC). The IC may manage all or part of the five major activities directly, or may opt to delegate such functions as required along the same lines of authority. A basic ICS operating guideline is that the IC is responsible until specific authority is transferred or delegated to another person. Large incidents usually require each of these activities to be established as separate sections within the organization, with appropriate delegation of authority from the IC to specific subordinate positions. Each of the primary ICS sections may be further sub-divided within their original structure as needed, again, while maintaining a clear flow of authorization directly to and from the IC. The IC will thereby determine if the specific incident requires the use of all sections and the staffing and resources to be allocated to a particular section. Regardless of the number of additional subordinate “layers,” as with the IC, responsibility is passed to and held by the designated individual(s) until either transferred to a relief, delegated to a subordinate, or until the incident is concluded altogether.

Facilities will be established depending on the kind and complexity of the incident or event, with standard terminology applied to the principal ICS facilities. These include *Incident Command Post (ICP)*, which serves as the “hub” of all command and control functions, to include communications, and from which the IC normally oversees all incident operations. There is only one ICP for each incident and every incident must have some form of an ICP. Other locations are established according to need: *Staging Areas* are locations at which resources are kept while awaiting incident assignment. Most large incidents will have a staging area, and some incidents may have several. The *Base* is a location at the incident at which primary service and support activities are performed. *Camps* are incident locations where resources may be kept to support incident operations. Camps differ from Staging Areas in that essential support operations are

done at Camps, and resources at Camps are not always immediately available for use. The *Helibase* is a location in and around an incident area at which helicopters may be parked, maintained, fueled, and equipped for incident operations. *Helispots* are temporary locations where helicopters can land and load and off-load personnel, equipment, and supplies. Any number of additional or alternative sites (e.g. medical support, dining and sanitary facilities) may be designated in accordance with a predetermined ICS plan, or as determined by the IC.

Each incident will also have an oral or written Incident Action Plan. The purpose of the plan is to provide all incident supervisory personnel with direction for future actions. Action plans that include the measurable tactical operations to be achieved are always prepared around a time frame called an Operational Period.

Operational Periods can be of various lengths, but should be no longer than twenty-four hours. The planning for an operational period must be done far enough in advance to ensure those registered resources are available when the Operational Period begins.

IV. ICS Communications Infrastructure

Centrally managed, interoperable communications are essential for virtually every aspect of the ICS structure to function. Communications to be used at the incident site require advance planning, to include the development of frequency inventories, frequency sharing agreements, use of synthesized mobile / portable radio equipment, and the use of available local, state and federal communications equipment, all of which will be combined as part of the available ICS infrastructure. The State Interoperability Executive Committees (SIEC), will address these areas as part of an overall ICS communications plan.

Communications during ICS incidents of any size are managed through the use of an incident communications center and a communications plan established for the use of command as well as tactical and support resources assigned to the incident.

Many local governments, whether participating in ICS plans or not, have established Emergency Operations Centers (EOCs), which can be activated quickly to facilitate centralized command and control during incident response. When a local government EOC is activated, SEMS regulations require the establishment of communication and coordination between the IC and the department operations center of the EOC, or the EOC itself, and also between the EOC and any state or local jurisdiction(s) having authority within the incident's boundaries.

ICS field response organizations will normally communicate with the local government level (either department operating centers or EOCs) through dispatch centers. Dispatch centers will not have command authority over incidents, but will act as directed by the IC or other designated authority in accordance with agency or jurisdiction policy, or as specifically delineated within the applicable ICS plan. Because of the potential number and diversity of communications systems involved, agency dispatch centers will often function in an intermediate role between IC, personnel in the field, and department operations centers or EOCs. Also, in some cases under

heavy load conditions, agencies may elect to move into an “expanded dispatch” mode, which may involve the delegation of a higher level of authority at the agency dispatch facility.

Dispatch centers may be departmental or may be centralized within the jurisdiction. Some jurisdictions have the capability to go from departmental dispatching to centralized dispatching when the local government EOC is activated. The jurisdiction’s dispatching arrangements and communication capability along with local policy will affect how operations are linked to the local government level.

In many jurisdictions, the ICS field response organizations will be primarily linked via the dispatch center(s) to the department operations center (DOC) of the agency that has jurisdiction over the incident. In these cases, DOCs have agency level authority over the assigned IC. The DOC is responsible for coordinating with the local government EOC. Alternatively, in some jurisdictions, ICS field response organizations may have direct communications with and/or receive policy direction from the local government EOC when it is activated. Whether this occurs, along with other possible operational variations consistent with the overall ICS management scheme, will depend on the size and policy of the jurisdiction, and the lines of communications that are available.

V. Plain Language Usage

It should be emphasized that, under ICS communications guidelines, plain language is to be used at all times.

VI. ICS Communications Management

As noted above, ICS Communications are organized as a component of the Logistics branch. The Communications Unit Leader, as detailed in the Communications Unit Leader Position Manual (ICS 223–5, originally developed by FIREScope) is therefore under the direction of the Service Branch Director or Logistics Section Chief, who in turn report directly to the IC. The Communications Unit Leader is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the incident communications center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.

The Communications Unit Leader’s specific responsibilities include, but are not necessarily limited to:

- Obtain a briefing from the Service Branch OIC or Logistics OIC
- Determine Communications unit personnel needs
- Advise on communication capabilities and limitations
- Prepare and implement the Incident Radio Communications Plan
- Ensure that the Incident Communications Center and Message Center are established as necessary

- Set up LMR/CMR, telephone and public address systems as necessary
- Establish appropriate communications distribution and maintenance locations within or adjacent to the ICP, at the base(s) or in remote locations (e.g. camps, helispots)
- Ensure communications systems are installed, tested, and repaired as necessary
- Ensure an equipment accountability system is established and maintained
- Ensure personal portable radio equipment is distributed per the Incident Control Radio Plan with consideration to battery replacement or recharging
- Provide technical information as required concerning:
 - Adequacy of communications systems currently in operation
 - Geographic limitation on communications systems
 - Equipment capabilities
 - Amount and type of equipment available
 - Anticipated problems and shortfalls concerning the use of communications equipment
- Supervise all Communication Unit activities
- Maintain records relating to the communications equipment as appropriate, to include channel settings on programmable radios
- Receive equipment from relieved or released units and reassign as necessary
- Maintain the Communications Unit Log

As with every other aspect of ICS, the Communications Unit Leader is allowed a considerable amount of discretion regarding the set-up and utilization of the specific communications network and individual elements within it. However, on some basis, the Communications Unit Leader, either directly or through the Head Dispatcher (if multiple dispatchers are used), or Incident Dispatcher (if a single dispatcher is used), will directly manage the use and prioritization of communications channels. This individual's specific duties include, but are not necessarily limited to:

- Obtain a briefing from the Communications Unit Leader
- Determine
 - Location of assignment
 - Communications procedures
 - Frequencies in use
 - Nets established or to be established
 - Equipment status
 - Capabilities, limitation and restrictions
 - Location of repeaters
 - Message center problems
- Ensure adequate communications center staffing levels as appropriate
- Obtain and review the Incident Action Plan to determine the incident organization and Communications Plan
- Set up the Communications Center, check out and test equipment
- Request servicing or replacement of any inoperative or marginal equipment

- Set up message center location as required
- Receive and transmit messages within and external to the incident
- Maintain files or Status Changes and General Messages
- Maintain a record of unusual incident occurrences affecting or potentially affecting communications
- Provide a briefing to relief on
 - Current activities
 - Equipment status
 - Any unusual communications situations
- Turn in appropriate documents to Communications Unit Leader
- Stand down / demobilize the Communications Center in accordance with the ICS Incident Demobilization Plan
- Maintain radio traffic logs

In addition to, or as a component of, the previously described positions, the Emergency Communications Coordinator (ECC) is responsible for emergency warnings and communications. Dispatcher(s) shall perform this function at the direction of the IC or the Communications Unit Leader, if applicable. The primary responsibilities of the ECC include:

- Activating the on site warning and instructional systems as directed by the IC
- Establishing communication links between the ICP and public news and information agencies
- Establishing a message control system for logging messages received by and dispatched from the IC and/or the ICP
- Maintaining primary and backup communications systems between the IC, the ICP, various responding personnel, departments on site and the local emergency management agencies, as directed by the IC or appropriate authority
- Receiving and disseminating information to appropriate individuals

As a component of directly overseeing the operation of the communications network, the Communications Unit Leader directly, or through the ECC, Lead or Incident Dispatcher(s), or some other position within the Communications Unit specifically delegated as such will be tasked with monitoring, assigning, and prioritizing the use of all radio communications channels, to include interoperability channels, in accordance with the Priority Access Levels discussed below. As with every other ICS position, the person tasked with channel management (“Channel Manager”) would have sole discretionary authority delegated through as many steps as necessary, but deriving directly from the IC.

VII. The ICS Communications Plan

The ICS Incident Radio Communications Plan is intended to provide documentation of all pertinent information concerning all radio frequency assignment, in one centralized and accessible location, for each operational period. The plan is a summary of information obtained

from the Radio Requirements Worksheet (ICS Form 216), and the Radio Frequency Assignment Worksheet (ICS Form 217). Information from the Radio Communications Plan on Frequency Assignment is normally placed on the appropriate Assignment List (ICS Form 204). At a minimum, the Incident Radio Communications Plan must delineate the Basic Radio Channel Utilization System/Cache, Channel(s) utilized, function, frequency, and assignment. Detailed instructions regarding preparing the above forms may be found in ICS 223–5.

VIII. Calling Channel Monitoring

It is implicit in the development of an ICS plan that all participating entities will monitor the calling channels for the 700 MHz interoperability spectrum on a 24–hour basis as recommended by the NCC for incorporation into the FCC Rules for the 700 MHz band as per the National Public Safety Planning Advisory Committee (NPSPAC) guidelines.

IX. Priority Access Levels

The NCC has recommended the FCC mandate priority access for users in critical situations only. During incidents where Priority Access has been initiated, the Channel Manager would assign channels through the calling channel based on priority. The NCC suggested the following priorities from highest to lowest:

- Level 1—Disaster and extreme emergency operations for mutual aid and interagency communications
- Level 2—Emergency or urgent operations involving imminent danger to life or property
- Level 3—Special event control, generally preplanned (including task force operations)
- Level 4—Single agency secondary communications (default priority)

In such cases where a higher priority party would require access to the channel, the Channel Manager would be authorized to restrict access to lower–priority users, or to direct any lower priority party already using the channel to cease communications to the extent necessary and until such time as that party could be reassigned subsequent to the clearing of a channel by a higher priority user. Such restrictions could be imposed at any time, and for any duration required, up until the incident is concluded and the control of the interoperable spectrum is returned to the SIEC or other non–emergency channel management authority.

X. Regional ICS Planning

One of the major features of ICS is its inherent flexibility to meet the needs of any size or number of organizations, and any type of incident. The SIEC in Region 45, with the support of the Planning Committee, will develop and implement a specific ICS plan or plans for the region in accordance with these guidelines and within the scope of the functions already recommended by the NCC for these entities.

**Appendix H: MEMORANDUM OF UNDERSTANDING
and SHARING AGREEMENT TEMPLATES:**

Memorandum of Understanding Template

(To be Placed on State Interoperability Executive Committee or RPC Letterhead)

Minimum Criteria Required in the MOU

TO: (signer of application and title)
 (agency name)

FROM: (name), Chairman

DATE: (mm/dd/yyyy)

SUBJECT: Memorandum of Understanding for Operating the 700 MHz
Interoperability Channels

This memorandum of understanding (hereafter referred to as MOU) shall be attached to the application when submitting it. By virtue of signing and submitting the application and this MOU, (agency name) (hereafter referred to as APPLICANT) affirms its willingness to comply with the proper operation of the Interoperability (interoperability) channels as dictated by the Region Planning Committee (here after referred to as RPC) as approved by the Federal Communications Commission (hereafter referred to as FCC) and by the conditions of this MOU.

The APPLICANT shall abide by the conditions of this MOU which are as follows:

- To operate by all applicable State, County, and City laws/ordinances.
- To utilize “plain language” for all transmissions.
- To monitor the Calling Channel(s) and coordinate the use of the Tactical Channels.
- To identify inappropriate use and mitigate the same from occurring in the future.
- To limit secondary Trunked operation to the interoperability channels specifically approved on the application and limited to channels listed below.
- To relinquish secondary Trunked operation of approved interoperability channels to requests for primary conventional access with same or higher priority.
- To mitigate contention for channels by exercising the Priority Levels identified in this MOU.

The preceding conditions are the primary, though not complete, requirements for operating in the interoperability channels. Refer to the Region Plan for the complete requirements list.

Priority Levels:

1. Disaster or extreme emergency operation for mutual aid and interagency communications;
2. Emergency or urgent operation involving imminent danger to life or property;
3. Special event control, generally of a preplanned nature (including Task Force operations)
4. Single agency secondary communications.

To resolve contention within the same priority, the channel should go to the organization with the wider span of control/authority. This shall be determined by the State Interoperability Executive Committee or RPC for the operation or by the levels of authority/government identified in the contention.

For clarification purposes and an aid to operate as authorized, any fixed base or mobile relay stations identified on the license for temporary locations (FCC station class FBT or FB2T, respectively) shall remain within the licensed area of operation. Similarly, vehicular/mobile repeater stations (FCC station class MO3) shall remain within the licensed area of operation. Federal agencies are permitted access to interoperability channels only as authorized by 47 CFR 2.102 (c) & 2.103 and Part 7.12 of the NTIA Manual.

Any violation of this MOU, the Region Plan, or FCC Rule shall be addressed immediately. The first level of resolution shall be between the parties involved, next the State Interoperability Executive Committee or RPC, and finally the FCC.

Secondary Trunked Channels

7TAC51 - Channel 23 & 24

7TAC52 - Channel 103 & 104

7TAC53 - Channel 183 & 184

7TAC54 - Channel 263 & 264

7TAC53 - Channel 119 & 120

7TAC71 - Channel 657 & 658

7TAC72 - Channel 737 & 738

7TAC73 - Channel 817 & 818

7TAC74 - Channel 897 & 898

7TAC75 - Channel 761 & 762

_____ (typed or printed name of authorized signer)

(authorized signer identified above and consistent with application)

(date)

(agency name)

(agency address)

____ (agency address)

(agency address)

(signer's phone)

(signer's email address, if available)

SHARING AGREEMENT TEMPLATE

(Agency letterhead of Licensee)

TO: (recipient person and title)
(recipient agency)

FROM: (authorizing person and title)
(authorizing agency)

DATE: (mm/dd/yyyy)

SUBJECT: Sharing Agreement

_____ **(grantor) authorizes** _____ **(grantee) to operate**
_____ **(quantity) mobile (vehicular or hand-held) radios. Such operation**
shall be per the following parameters.

Call Sign	Frequency(ies)	Max. Power	Channel Description
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(Use additional attachments as necessary for more frequencies/channels)

This written agreement applies to operations in cooperation and coordination with activities of the licensee per Region (#) Plan, FCC Rules 47 CFR Parts 2.102(c), 2.103 and 90.421 and Part 7.12 of the NTIA Manual. Furthermore, grantor reserves the right to effectively eliminate the possibility of unauthorized operation, which ultimately could result in terminating this written agreement.

_____ (typed or printed name of authorized signer)
_____ (authorized signer identified above)
_____ (date)
_____ (agency name)
_____ (agency address)
_____ (agency address)
_____ (agency address)
_____ (agency address)
_____ (signer's phone)
_____ (signer's email address, if available)

Appendix I: DISPUTE RESOLUTION PROCESS:

REGIONAL COMMITTEE DISPUTE RESOLUTION PROCESS

INTRODUCTION

The Regional Committee is established under section _____, which came into effect on _____. It is an independent Committee apart from the Federal Communications Commission with authority to evaluate application for public safety uses of the spectrum allocated under FCC Docket _____. In addition appeals from decisions made with respect to a variety of matters regulated by the Regional Committee will be heard. The formal requirements of the appeal process are set out below.

In order to ensure that the appeal process is open and understandable to the public, the Regional Committee has developed this procedure. Those involved in the appeal process can expect the Committee and its members to follow the procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not dealt with in this document, the Committee will do whatever is necessary to enable it to adjudicate fairly, effectively and completely on the appeal. In addition, the Committee may dispense with compliance with any part or all of a particular procedure where it is appropriate in the circumstances. As the Committee gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require a modification to the Regional Plan and will be made available to the public.

The Regional Committee will make every effort to process appeals in a timely fashion and issue decisions expeditiously.

Appeals Committee Members

The Regional Chairman may organize the Committee into Sub-Committees, each comprised of one or more members, the Appeals Sub-Committee is one of those Sub-Committees.

Where an appeal is scheduled to be heard by this Sub-Committee the chair is determined as follows:

- (a) if the chair of the Committee is on the Sub-Committee, he will be the chair;
- (b) if the chair of the Committee is not on the Sub-Committee but the vice-chair is, the vice-chair will be the chair; and
- (c) if neither the chair nor the vice-chair is on the Sub-Committee, the Regional Committee will designate one of the members to be the chair.

Withdrawal or Disqualification of a Committee Member on the Grounds of Bias

Where the chair or a Committee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that a member, whether consciously or unconsciously, would not decide a matter fairly, the

member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party to an appeal may challenge a member on the basis of real or a reasonable apprehension of bias.

Correspondence (Communicating) with the Committee

To ensure the appeal process is kept open and fair to the participants, any correspondence to the Regional Committee must be sent to the Chairman and be copied to all other Committee member and other parties to the appeal, if applicable.

Committee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate.

The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

THE APPEAL PROCESS

Filing an Appeal

What can be appealed

The Committee hears appeals from a determination or allocation and shall include the following:

- System Parameters
- Coverage
- Interference
- Frequency Allocations

Who can appeal

An official of the entity who filed the original application must be the person who files the appeal on behalf of the entity.

How to appeal

A notice of appeal must be served upon the Regional Committee. The notice of appeal may be "delivered" by mail, courier, or hand delivered to the office of the Region 45 Chair.

Certain things must be included in a notice of appeal for it to be accepted. The notice of appeal **must** include:

1. the name and address of the entity;
2. the name of the person making the request for an appeal on behalf of the entity;

3. the grounds for appeal (a detailed explanation of the entity's objections to the determination - describe errors in the decision);
4. a description of the relief requested (what do you want the Committee to order at the end of the appeal);
5. the signature of the entity's representative

Time limit for filing the appeal

To appeal a determination or allocation the entity that is subject to the determination must deliver a notice of appeal **within three weeks** after receiving the decision. If a notice of appeal is not delivered within the time required, the right to an appeal is lost. However, the Committee is allowed to extend the deadline, either before or after its expiration based upon a majority plus one vote of the Committee.

Extension of time to appeal

The Committee has the discretion to extend the time to appeal either before or after the three week deadline.

A request for an extension should be made to the Committee, in writing, and include the reasons for the delay in filing the notice of appeal and any other reasons which the requester believes support the granting of an extension of time to file the appeal. A request for an extension should accompany the notice of appeal.

In deciding whether to grant an extension, the Committee will consider whether fairness requires an extension. The Committee will take into account the length of the delay, the adequacy of the reasons for the delay, the prejudice to those affected by the delay and any impacts that may result from an extension. Other factors not identified could be relevant depending on the circumstances of the particular case.

Rejection of a notice of appeal

The Committee may reject a notice of appeal if it is determined by the RPC that the entity does not have standing to appeal or if the Committee does not have jurisdiction over the subject matter or the remedy sought.

Before a notice of appeal is rejected, the Committee will inform the entity of this in writing, with reasons, and give the entity a three-week opportunity to make submissions and any potential parties with an opportunity to respond.

Adding parties to the appeal

In addition to the parties mentioned above, the Committee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal.

Anyone wanting to obtain party status should make a written request to the Committee as early as possible. The written request should contain the following information:

- (a) the name, address, telephone and fax number, if any, of the person submitting the request;
 - (b) a detailed description of how the person is “affected” by the notice of appeal
- and**
- (c) the reasons why the person should be included in the appeal; and
 - (d) the signature of the person submitting the request.

Intervener status

The Committee may also invite or permit a someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. “may be affected by the appeal”) but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal.

Someone wanting to take part in an appeal as an intervener should send a written request to the Committee. The written request should contain the following information: (to be determined by RPC)

Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Committee will provide all parties with an opportunity to make representations if they wish to do so.

Type of appeal (written or oral) hearing

An appeal may be conducted by way of written submissions, oral hearing or a combination of both. The Committee will determine the appropriate type of appeal after a complete notice of appeal has been receive

The Committee will normally conduct an oral hearing although it may order that a hearing proceed by way of written submissions in certain cases. Where a hearing by written submissions is being considered by the Committee, the Committee may request input from the parties.

Burden of proof

The general rule is that the burden or responsibility for proving a fact is on the person who asserts it.

Notification of expert evidence

The Committee requires any party that intends to present expert evidence at a hearing to provide the Committee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The notice should include a brief statement of the expert's qualifications and areas of expertise;

If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Committee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed 30 days prior to the hearing date.

Documents

If a party will be referring to a document that was not provided to the Committee and all parties prior to the hearing, sufficient copies of the document must be brought to the hearing for the Committee and all other parties.

APPEALING THE APPEALS SUB-COMMITTEE'S DECISION

If a party is not satisfied with the decision of the Region's Appeals Subcommittee's Decision, he or she can appeal that decision to the National 700 MHz Planning Oversight Committee.

Appendix J: CURRENT LIST OF EXECUTIVE COMMITTEE OFFICERS:

Chairperson: Russell Schreiner
Communications Engineer, City of Sheboygan Police Department
828 Center Ave.
Sheboygan, WI 53081
rschreiner@ci.sheboygan.wi.us
Phone: 920 448 7628

Term: May 1, 2003 to current

Vice-Chairperson: Randall H. Frailing
Communications and Electronics
Green Bay Dept of Public Works, Traffic Division
1820 Mills St.
Green Bay, WI 54302
Randyfr@ci.green-bay.wi.us
Phone: 920 391 3651

Term: May 1, 2003 to current

Secretary: Paul Wittkamp
Communications Coordinator
State Bureau of EMS, Div. of Public Health
1 W. Wilson St.
Madison, WI 53701
wittkp@dhfs.state.wi.us
Phone: 608 261 9306

Term: May 1, 2003 to current

Treasurer: Ann Sullivan
Wisconsin chapter APCO

Frequency Specialist: Carl Guse
Frequency Specialist
Bureau of Communications
Division of State Patrol
4802 Sheboygan Ave.
Madison, WI 53707
Phone: 608 266 2497
carl.guse@dot.state.wi.us

Appendix K: COUNTY CHANNEL ALLOTMENT:

**REGION 45
CHANNEL ALLOTMENT**

COUNTY	CHANNEL	CLASS	BASE FREQ	MOBILE FREQ
Adams	417-420	Voice General Use	771.612500	801.612500
	525-528	Voice General Use	772.287500	802.287500
	597-600	Voice General Use	772.737500	802.737500
	753-756	Voice General Use	773.712500	803.712500
	873-876	Voice General Use	774.462500	804.462500
	29-32	Voice State License	769.187500	799.187500
	149-152	Voice State License	769.937500	799.937500
Ashland	41-44	Voice General Use	769.262500	799.262500
	89-92	Voice General Use	769.562500	799.562500
	137-140	Voice General Use	769.862500	799.862500
	245-248	Voice General Use	770.537500	800.537500
	285-288	Voice General Use	770.787500	800.787500
	345-348	Voice General Use	771.162500	801.162500
	421-424	Voice General Use	771.637500	801.637500
	465-468	Voice General Use	771.912500	801.912500
	529-532	Voice General Use	772.312500	802.312500
	593-596	Voice General Use	772.712500	802.712500
	665-668	Voice General Use	773.162500	803.162500
	713-716	Voice General Use	773.462500	803.462500
	757-760	Voice General Use	773.737500	803.737500
	861-864	Voice General Use	774.387500	804.387500
	29-32	Voice State License	769.187500	799.187500
	105-108	Voice State License	769.662500	799.662500
	145-148	Voice State License	769.912500	799.912500
	649-652	Voice State License	773.062500	803.062500
	729-732	Voice State License	773.562500	803.562500
	849-852	Voice State License	774.312500	804.312500
Barron	17-20	Voice General Use	769.112500	799.112500
	93-96	Voice General Use	769.587500	799.587500
	177-180	Voice General Use	770.112500	800.112500
	253-256	Voice General Use	770.587500	800.587500
	341-344	Voice General Use	771.137500	801.137500
	441-444	Voice General Use	771.762500	801.762500
	497-500	Voice General Use	772.112500	802.112500
	549-552	Voice General Use	772.437500	802.437500
	589-592	Voice General Use	772.687500	802.687500

	665-668	Voice General Use	773.162500	803.162500
	153-156	Voice State License	769.962500	799.962500
	233-236	Voice State License	770.462500	800.462500
	653-656	Voice State License	773.087500	803.087500
	933-936	Voice State License	774.837500	804.837500
Bayfield	121-124	Voice General Use	769.762500	799.762500
	173-176	Voice General Use	770.087500	800.087500
	325-328	Voice General Use	771.037500	801.037500
	381-384	Voice General Use	771.387500	801.387500
	437-440	Voice General Use	771.737500	801.737500
	477-480	Voice General Use	771.987500	801.987500
	517-520	Voice General Use	772.237500	802.237500
	557-560	Voice General Use	772.487500	802.487500
	609-612	Voice General Use	772.812500	802.812500
	793-796	Voice General Use	773.962500	803.962500
	913-916	Voice General Use	774.712500	804.712500
	69-72	Voice State License	769.437500	799.437500
	189-192	Voice State License	770.187500	800.187500
	229-232	Voice State License	770.437500	800.437500
	769-772	Voice State License	773.812500	803.812500
	929-932	Voice State License	774.812500	804.812500
Brown	57-60	Voice General Use	769.362500	799.362500
	97-100	Voice General Use	769.612500	799.612500
	137-140	Voice General Use	769.862500	799.862500
	201-204	Voice General Use	770.262500	800.262500
	249-252	Voice General Use	770.562500	800.562500
	289-292	Voice General Use	770.812500	800.812500
	345-348	Voice General Use	771.162500	801.162500
	409-412	Voice General Use	771.562500	801.562500
	457-460	Voice General Use	771.862500	801.862500
	497-500	Voice General Use	772.112500	802.112500
	537-540	Voice General Use	772.362500	802.362500
	581-584	Voice General Use	772.637500	802.637500
	629-632	Voice General Use	772.937500	802.937500
	677-680	Voice General Use	773.237500	803.237500
	717-720	Voice General Use	773.487500	803.487500
	757-760	Voice General Use	773.737500	803.737500
	797-800	Voice General Use	773.987500	803.987500
	945-948	Voice General Use	774.912500	804.912500
	65-68	Voice State License	769.412500	799.412500
	145-148	Voice State License	769.912500	799.912500
	305-308	Voice State License	770.912500	800.912500
	653-656	Voice State License	773.087500	803.087500
	733-736	Voice State License	773.587500	803.587500

	773-776	Voice State License	773.837500	803.837500
	845-848	Voice State License	774.287500	804.287500
	893-896	Voice State License	774.587500	804.587500
Buffalo	133-136	Voice General Use	769.837500	799.837500
	337-340	Voice General Use	771.112500	801.112500
	381-384	Voice General Use	771.387500	801.387500
	425-428	Voice General Use	771.662500	801.662500
	497-500	Voice General Use	772.112500	802.112500
	797-800	Voice General Use	773.987500	803.987500
	229-232	Voice State License	770.437500	800.437500
	653-656	Voice State License	773.087500	803.087500
Burnett	169-172	Voice General Use	770.062500	800.062500
	421-424	Voice General Use	771.637500	801.637500
	525-528	Voice General Use	772.287500	802.287500
	597-600	Voice General Use	772.737500	802.737500
	757-760	Voice General Use	773.737500	803.737500
	833-836	Voice General Use	774.212500	804.212500
	105-108	Voice State License	769.662500	799.662500
	773-776	Voice State License	773.837500	803.837500
Calumet	325-328	Voice General Use	771.037500	801.037500
	393-396	Voice General Use	771.462500	801.462500
	441-444	Voice General Use	771.762500	801.762500
	505-508	Voice General Use	772.162500	802.162500
	545-548	Voice General Use	772.412500	802.412500
	185-188	Voice State License	770.162500	800.162500
	313-316	Voice State License	770.962500	800.962500
Chippewa	121-124	Voice General Use	769.762500	799.762500
	241-244	Voice General Use	770.512500	800.512500
	293-296	Voice General Use	770.837500	800.837500
	369-372	Voice General Use	771.312500	801.312500
	417-420	Voice General Use	771.612500	801.612500
	489-492	Voice General Use	772.062500	802.062500
	529-532	Voice General Use	772.312500	802.312500
	577-580	Voice General Use	772.612500	802.612500
	617-620	Voice General Use	772.862500	802.862500
	713-716	Voice General Use	773.462500	803.462500
	753-756	Voice General Use	773.712500	803.712500
	861-864	Voice General Use	774.387500	804.387500
	913-916	Voice General Use	774.712500	804.712500
	65-68	Voice State License	769.412500	799.412500
	185-188	Voice State License	770.162500	800.162500
	225-228	Voice State License	770.412500	800.412500

	313-316	Voice State License	770.962500	800.962500
Clark	89-92	Voice General Use	769.562500	799.562500
	345-348	Voice General Use	771.162500	801.162500
	397-400	Voice General Use	771.487500	801.487500
	449-452	Voice General Use	771.812500	801.812500
	501-504	Voice General Use	772.137500	802.137500
	545-548	Voice General Use	772.412500	802.412500
	593-596	Voice General Use	772.712500	802.712500
	633-636	Voice General Use	772.962500	802.962500
	677-680	Voice General Use	773.237500	803.237500
	945-948	Voice General Use	774.912500	804.912500
	33-36	Voice State License	769.212500	799.212500
	305-308	Voice State License	770.912500	800.912500
	685-688	Voice State License	773.287500	803.287500
Columbia	49-52	Voice General Use	769.312500	799.312500
	89-92	Voice General Use	769.562500	799.562500
	177-180	Voice General Use	770.112500	800.112500
	241-244	Voice General Use	770.512500	800.512500
	289-292	Voice General Use	770.812500	800.812500
	349-352	Voice General Use	771.187500	801.187500
	393-396	Voice General Use	771.462500	801.462500
	449-452	Voice General Use	771.812500	801.812500
	493-496	Voice General Use	772.087500	802.087500
	589-592	Voice General Use	772.687500	802.687500
	713-716	Voice General Use	773.462500	803.462500
	909-912	Voice General Use	774.687500	804.687500
	73-76	Voice State License	769.462500	799.462500
	265-268	Voice State License	770.662500	800.662500
	813-816	Voice State License	774.087500	804.087500
Crawford	173-176	Voice General Use	770.087500	800.087500
	373-376	Voice General Use	771.337500	801.337500
	445-448	Voice General Use	771.787500	801.787500
	501-504	Voice General Use	772.137500	802.137500
	601-604	Voice General Use	772.762500	802.762500
	713-716	Voice General Use	773.462500	803.462500
	753-756	Voice General Use	773.712500	803.712500
	825-828	Voice General Use	774.162500	804.162500
	909-912	Voice General Use	774.687500	804.687500
	265-268	Voice State License	770.662500	800.662500
	813-816	Voice State License	774.087500	804.087500
Door	49-52	Voice General Use	769.312500	799.312500
	125-128	Voice General Use	769.787500	799.787500

	169-172	Voice General Use	770.062500	800.062500
	337-340	Voice General Use	771.112500	801.112500
	377-380	Voice General Use	771.362500	801.362500
	437-440	Voice General Use	771.737500	801.737500
	521-524	Voice General Use	772.262500	802.262500
	573-576	Voice General Use	772.587500	802.587500
	621-624	Voice General Use	772.887500	802.887500
	665-668	Voice General Use	773.162500	803.162500
	705-708	Voice General Use	773.412500	803.412500
	789-792	Voice General Use	773.937500	803.937500
	865-868	Voice General Use	774.412500	804.412500
	905-908	Voice General Use	774.662500	804.662500
	105-108	Voice State License	769.662500	799.662500
	189-192	Voice State License	770.187500	800.187500
	269-272	Voice State License	770.687500	800.687500
	645-648	Voice State License	773.037500	803.037500
	725-728	Voice State License	773.537500	803.537500
	809-812	Voice State License	774.062500	804.062500
	885-888	Voice State License	774.537500	804.537500
	933-936	Voice State License	774.837500	804.837500
Douglas	13-16	Voice General Use	769.087500	799.087500
	57-60	Voice General Use	769.362500	799.362500
	97-100	Voice General Use	769.612500	799.612500
	161-164	Voice General Use	770.012500	800.012500
	209-212	Voice General Use	770.312500	800.312500
	249-252	Voice General Use	770.562500	800.562500
	289-292	Voice General Use	770.812500	800.812500
	361-364	Voice General Use	771.262500	801.262500
	405-408	Voice General Use	771.537500	801.537500
	493-496	Voice General Use	772.087500	802.087500
	533-536	Voice General Use	772.337500	802.337500
	577-580	Voice General Use	772.612500	802.612500
	621-624	Voice General Use	772.887500	802.887500
	661-664	Voice General Use	773.137500	803.137500
	701-704	Voice General Use	773.387500	803.387500
	821-824	Voice General Use	774.137500	804.137500
	945-948	Voice General Use	774.912500	804.912500
	33-36	Voice State License	769.212500	799.212500
	149-152	Voice State License	769.937500	799.937500
	693-696	Voice State License	773.337500	803.337500
	733-736	Voice State License	773.587500	803.587500
	853-856	Voice State License	774.337500	804.337500
Dunn	45-48	Voice General Use	769.287500	799.287500
	85-88	Voice General Use	769.537500	799.537500

	209-212	Voice General Use	770.312500	800.312500
	281-284	Voice General Use	770.762500	800.762500
	361-364	Voice General Use	771.262500	801.262500
	409-412	Voice General Use	771.562500	801.562500
	469-472	Voice General Use	771.937500	801.937500
	541-544	Voice General Use	772.387500	802.387500
	601-604	Voice General Use	772.762500	802.762500
	941-944	Voice General Use	774.887500	804.887500
	269-272	Voice State License	770.687500	800.687500
	645-648	Voice State License	773.037500	803.037500
	849-852	Voice State License	774.312500	804.312500
	889-892	Voice State License	774.562500	804.562500
Eau Claire	13-16	Voice General Use	769.087000	799.087500
	53-56	Voice General Use	769.337500	799.337500
	161-164	Voice General Use	770.012500	800.012500
	217-220	Voice General Use	770.362500	800.362500
	257-260	Voice General Use	770.612500	800.612500
	353-356	Voice General Use	771.212500	801.212500
	437-440	Voice General Use	771.737500	801.737500
	477-480	Voice General Use	771.987500	801.987500
	517-520	Voice General Use	772.237500	802.237500
	561-564	Voice General Use	772.512500	802.512500
	661-664	Voice General Use	773.137500	803.137500
	701-704	Voice General Use	773.387500	803.387500
	745-748	Voice General Use	773.662500	803.662500
	785-788	Voice General Use	773.912500	803.912500
	825-828	Voice General Use	774.162500	804.162500
	901-904	Voice General Use	774.637500	804.637500
	113-116	Voice State License	769.712500	799.712500
	193-196	Voice State License	770.212500	800.212500
	733-736	Voice State License	773.587500	803.587500
	773-776	Voice State License	773.837500	803.837500
	813-816	Voice State License	774.087500	804.087500
	929-932	Voice State License	774.812500	804.812500
Florence	89-92	Voice General Use	769.562500	799.562500
	325-328	Voice General Use	771.037500	801.037500
	409-412	Voice General Use	771.562500	801.562500
	449-452	Voice General Use	771.812500	801.812500
	513-516	Voice General Use	772.212500	802.212500
	553-556	Voice General Use	772.462500	802.462500
	629-632	Voice General Use	772.937500	802.937500
	229-232	Voice State License	770.437500	800.437500
	809-812	Voice State License	774.062500	804.062500

Fond du Lac	13-16	Voice General Use	769.087500	799.087500
	129-132	Voice General Use	769.812500	799.812500
	425-428	Voice General Use	771.662500	801.662500
	517-520	Voice General Use	772.237500	802.237500
	557-560	Voice General Use	772.487500	802.487500
	601-604	Voice General Use	772.762500	802.762500
	741-744	Voice General Use	773.637500	803.637500
	793-796	Voice General Use	773.962500	803.962500
	833-836	Voice General Use	774.212500	804.212500
	877-880	Voice General Use	774.487500	804.487500
	917-920	Voice General Use	774.737500	804.737500
	225-228	Voice State License	770.412500	800.412500
	273-276	Voice State License	770.712500	800.712500
	729-732	Voice State License	773.562500	803.562500
	933-936	Voice State License	774.837500	804.837500
Forest	53-56	Voice General Use	769.337500	799.337500
	121-124	Voice General Use	769.762500	799.762500
	333-336	Voice General Use	771.087500	801.087500
	401-404	Voice General Use	771.512500	801.512500
	485-488	Voice General Use	772.037500	802.037500
	593-596	Voice General Use	772.712500	802.712500
	821-824	Voice General Use	774.137500	804.137500
	861-864	Voice General Use	774.387500	804.387500
	73-76	Voice State License	769.462500	799.462500
	185-188	Voice State License	770.162500	800.162500
Grant	893-896	Voice State License	774.587500	804.587500
	41-44	Voice General Use	769.262500	799.262500
	129-132	Voice General Use	769.812500	799.812500
	213-216	Voice General Use	770.337500	800.337500
	257-260	Voice General Use	770.612500	800.612500
	321-324	Voice General Use	771.012500	801.012500
	381-384	Voice General Use	771.387500	801.387500
	473-476	Voice General Use	771.962500	801.962500
	513-516	Voice General Use	772.212500	802.212500
	625-628	Voice General Use	772.912500	802.912500
	673-676	Voice General Use	773.212500	803.212500
	797-800	Voice General Use	773.987500	803.987500
	837-840	Voice General Use	774.237500	804.237500
	877-880	Voice General Use	774.487500	804.487500
	689-692	Voice State License	773.312500	803.312500
	729-732	Voice State License	773.562500	803.562500
	849-852	Voice State License	774.312500	804.312500
	893-896	Voice State License	774.587500	804.587500

Green	201-204	Voice General Use	770.262500	800.262500
	297-300	Voice General Use	770.862500	800.862500
	353-356	Voice General Use	771.212500	801.212500
	397-400	Voice General Use	771.487500	801.487500
	481-484	Voice General Use	772.012500	802.012500
	541-544	Voice General Use	772.387500	802.387500
	593-596	Voice General Use	772.712500	802.712500
	225-228	Voice State License	770.412500	800.412500
	725-728	Voice State License	773.537500	803.537500
Green Lake	373-376	Voice General Use	771.337500	801.337500
	457-460	Voice General Use	771.862500	801.862500
	529-532	Voice General Use	772.312500	802.312500
	629-632	Voice General Use	772.937500	802.937500
	825-828	Voice General Use	774.162500	804.162500
	33-36	Voice State License	769.212500	799.212500
	305-308	Voice State License	770.912500	800.912500
	849-852	Voice State License	774.312500	804.312500
Iowa	413-416	Voice General Use	771.587500	801.587500
	453-456	Voice General Use	771.837500	801.837500
	497-500	Voice General Use	772.112500	802.112500
	565-568	Voice General Use	772.537500	802.537500
	717-720	Voice General Use	773.487500	803.487500
	757-760	Voice General Use	773.737500	803.737500
	913-916	Voice General Use	774.712500	804.712500
	105-108	Voice State License	769.662500	799.662500
	269-272	Voice State License	770.687500	800.687500
	885-888	Voice State License	774.537500	804.537500
Iron	169-172	Voice General Use	770.062500	800.062500
	257-260	Voice General Use	770.612500	800.612500
	297-300	Voice General Use	770.862500	800.862500
	337-340	Voice General Use	771.112500	801.112500
	433-436	Voice General Use	771.712500	801.712500
	489-492	Voice General Use	772.062500	802.062500
	553-556	Voice General Use	772.462500	802.462500
	601-604	Voice General Use	772.762500	802.762500
	869-872	Voice General Use	774.437500	804.437500
	917-920	Voice General Use	774.737500	804.737500
	185-188	Voice State License	770.162500	800.162500
	225-228	Voice State License	770.412500	800.412500
	313-316	Voice State License	770.962500	800.962500
	889-892	Voice State License	774.562500	804.562500
	933-936	Voice State License	774.837500	804.837500

Jackson	129-132	Voice General Use	769.812500	799.812500
	177-180	Voice General Use	770.112500	800.112500
	249-252	Voice General Use	770.562500	800.562500
	289-292	Voice General Use	770.812500	800.812500
	537-540	Voice General Use	772.362500	802.362500
	621-624	Voice General Use	772.887500	802.887500
	793-796	Voice General Use	773.962500	803.962500
	69-72	Voice State License	769.437500	799.437500
	153-156	Voice State License	769.962500	799.962500
Juneau	13-16	Voice General Use	769.087500	799.087500
	205-208	Voice General Use	770.287500	800.287500
	325-328	Voice General Use	771.037500	801.037500
	365-368	Voice General Use	771.287500	801.287500
	461-464	Voice General Use	771.887500	801.887500
	581-584	Voice General Use	772.637500	802.637500
	741-744	Voice General Use	773.637500	803.637500
	109-112	Voice State License	769.687500	799.687500
	185-188	Voice State License	770.162500	800.162500
Kewaunee	273-276	Voice State License	770.712500	800.712500
	17-20	Voice General Use	769.112500	799.112500
	209-212	Voice General Use	770.312500	800.312500
	329-332	Voice General Use	771.062500	801.062500
	389-392	Voice General Use	771.437500	801.437500
	429-432	Voice General Use	771.687500	801.687500
	481-484	Voice General Use	772.012500	802.012500
	553-556	Voice General Use	772.462500	802.462500
	597-600	Voice General Use	772.737500	802.737500
	745-748	Voice General Use	773.662500	803.662500
	825-828	Voice General Use	774.162500	804.162500
	913-916	Voice General Use	774.712500	804.712500
	33-36	Voice State License	769.212500	799.212500
	229-232	Voice State License	770.437500	800.437500
	689-692	Voice State License	773.312500	803.312500
La Crosse	49-52	Voice General Use	769.312500	799.312500
	121-124	Voice General Use	769.762500	799.762500
	201-204	Voice General Use	770.262500	800.262500
	241-244	Voice General Use	770.512500	800.512500
	281-284	Voice General Use	770.762500	800.762500
	329-332	Voice General Use	771.062500	801.062500
	369-372	Voice General Use	771.312500	801.312500
	417-420	Voice General Use	771.612500	801.612500
	469-472	Voice General Use	771.937500	801.937500

	521-524	Voice General Use	772.262500	802.262500
	605-608	Voice General Use	772.787500	802.787500
	669-672	Voice General Use	773.187500	803.187500
	709-712	Voice General Use	773.437500	803.437500
	757-760	Voice General Use	773.737500	803.737500
	833-836	Voice General Use	774.212500	804.212500
	877-880	Voice General Use	774.487500	804.487500
	917-920	Voice General Use	774.737500	804.737500
	105-108	Voice State License	769.662500	799.662500
	269-272	Voice State License	770.687500	800.687500
	693-696	Voice State License	773.337500	803.337500
	769-772	Voice State License	773.812500	803.812500
	849-852	Voice State License	774.312500	804.312500
	893-896	Voice State License	774.587500	804.587500
	933-936	Voice State License	774.837500	804.837500
Lafayette	337-340	Voice General Use	771.112500	801.112500
	429-432	Voice General Use	771.687500	801.687500
	489-492	Voice General Use	772.062500	802.062500
	581-584	Voice General Use	772.637500	802.637500
	633-636	Voice General Use	772.962500	802.962500
	25-28	Voice State License	769.162500	799.162500
	69-72	Voice State License	769.437500	799.437500
	933-936	Voice State License	774.837500	804.837500
Langlade	165-168	Voice General Use	770.037500	800.037500
	217-220	Voice General Use	770.362500	800.362500
	297-300	Voice General Use	770.862500	800.862500
	373-376	Voice General Use	771.337500	801.337500
	429-432	Voice General Use	771.687500	801.687500
	549-552	Voice General Use	772.437500	802.437500
	613-616	Voice General Use	772.837500	802.837500
	673-676	Voice General Use	773.212500	803.212500
	717-720	Voice General Use	773.487500	803.487500
	945-948	Voice General Use	774.912500	804.912500
	265-268	Voice State License	770.662500	800.662500
	313-316	Voice State License	770.962500	800.962500
	645-648	Voice State License	773.037500	803.037500
	765-768	Voice State License	773.787500	803.787500
Lincoln	45-48	Voice General Use	769.287500	799.287500
	85-88	Voice General Use	769.537500	799.537500
	341-344	Voice General Use	771.137500	801.137500
	393-396	Voice General Use	771.462500	801.462500
	469-472	Voice General Use	771.937500	801.937500
	557-560	Voice General Use	772.487500	802.487500

	597-600	Voice General Use	772.737500	802.737500
	661-664	Voice General Use	773.137500	803.137500
	701-704	Voice General Use	773.387500	803.387500
	745-748	Voice General Use	773.662500	803.662500
	825-828	Voice General Use	774.162500	804.162500
	865-868	Voice General Use	774.412500	804.412500
	909-912	Voice General Use	774.687500	804.687500
	25-28	Voice State License	769.162500	799.162500
	69-72	Voice State License	769.437500	799.437500
	113-116	Voice State License	769.712500	799.712500
	233-236	Voice State License	770.462500	800.462500
Manitowoc	85-88	Voice General Use	769.537500	799.537500
	173-176	Voice General Use	770.087500	800.087500
	217-220	Voice General Use	770.362500	800.362500
	257-260	Voice General Use	770.612500	800.612500
	373-376	Voice General Use	771.337500	801.337500
	417-420	Voice General Use	771.612500	801.612500
	473-476	Voice General Use	771.962500	801.962500
	709-712	Voice General Use	773.437500	803.437500
	785-788	Voice General Use	773.912500	803.912500
	113-116	Voice State License	769.712500	799.712500
	265-268	Voice State License	770.662500	800.662500
	765-768	Voice State License	773.787500	803.787500
	805-808	Voice State License	774.037500	804.037500
Marathon	17-20	Voice General Use	769.112500	799.112500
	57-60	Voice General Use	769.362500	799.362500
	97-100	Voice General Use	769.612500	799.612500
	137-140	Voice General Use	769.862500	799.862500
	201-204	Voice General Use	770.262500	800.262500
	245-248	Voice General Use	770.537500	800.537500
	285-288	Voice General Use	770.787500	800.787500
	361-364	Voice General Use	771.262500	801.262500
	405-408	Voice General Use	771.537500	801.537500
	457-460	Voice General Use	771.862500	801.862500
	533-536	Voice General Use	772.337500	802.337500
	573-576	Voice General Use	772.587500	802.587500
	625-628	Voice General Use	772.912500	802.912500
	709-712	Voice General Use	773.437500	803.437500
	757-760	Voice General Use	773.737500	803.737500
	797-800	Voice General Use	773.987500	803.987500
	837-840	Voice General Use	774.237500	804.237500
	877-880	Voice General Use	774.487500	804.487500
	917-920	Voice General Use	774.737500	804.737500
	145-148	Voice State License	769.912500	799.912500

	189-192	Voice State License	770.187500	800.187500
	653-656	Voice State License	773.087500	803.087500
	693-696	Voice State License	773.337500	803.337500
	805-808	Voice State License	774.037500	804.037500
	845-848	Voice State License	774.287500	804.287500
	889-892	Voice State License	774.562500	804.562500
	933-936	Voice State License	774.837500	804.837500
Marinette	41-44	Voice General Use	769.262500	799.262500
	81-84	Voice General Use	769.512500	799.512500
	173-176	Voice General Use	770.087500	800.087500
	213-216	Voice General Use	770.337500	800.337500
	285-288	Voice General Use	770.787500	800.787500
	353-356	Voice General Use	771.212500	801.212500
	393-396	Voice General Use	771.462500	801.462500
	433-436	Voice General Use	771.712500	801.712500
	473-476	Voice General Use	771.962500	801.962500
	529-532	Voice General Use	772.312500	802.312500
	577-580	Voice General Use	772.612500	802.612500
	617-620	Voice General Use	772.862500	802.862500
	661-664	Voice General Use	773.137500	803.137500
	709-712	Voice General Use	773.437500	803.437500
	753-756	Voice General Use	773.712500	803.712500
	793-796	Voice General Use	773.962500	803.962500
	837-840	Voice General Use	774.237500	804.237500
	917-920	Voice General Use	774.737500	804.737500
	25-28	Voice State License	769.162500	799.162500
	113-116	Voice State License	769.712500	799.712500
	649-652	Voice State License	773.062500	803.062500
	729-732	Voice State License	773.562500	803.562500
	769-772	Voice State License	773.812500	803.812500
	849-852	Voice State License	774.312500	804.312500
	929-932	Voice State License	774.812500	804.812500
Marquette	133-136	Voice General Use	769.837500	799.837500
	201-204	Voice General Use	770.262500	800.262500
	381-384	Voice General Use	771.387500	801.387500
	433-436	Voice General Use	771.712500	801.712500
	509-512	Voice General Use	772.187500	802.187500
	561-564	Voice General Use	772.512500	802.512500
	605-608	Voice General Use	772.787500	802.787500
	797-800	Voice General Use	773.987500	803.987500
	837-840	Voice General Use	774.237500	804.237500
	189-192	Voice State License	770.187500	800.187500
	649-652	Voice State License	773.062500	803.062500
	889-892	Voice State License	774.562500	804.562500

Menominee	205-208	Voice General Use	770.287500	800.287500
	253-256	Voice General Use	770.587500	800.587500
	329-332	Voice General Use	771.062500	801.062500
	389-392	Voice General Use	771.437500	801.437500
	441-444	Voice General Use	771.762500	801.762500
	501-504	Voice General Use	772.137500	802.137500
	781-784	Voice General Use	773.887500	803.887500
	913-916	Voice General Use	774.712500	804.712500
	149-152	Voice State License	769.937500	799.937500
	689-692	Voice State License	773.312500	803.312500
Monroe	57-60	Voice General Use	769.362500	799.362500
	97-100	Voice General Use	769.612500	799.612500
	137-140	Voice General Use	769.862500	799.862500
	385-388	Voice General Use	771.412500	801.412500
	453-456	Voice General Use	771.837500	801.837500
	505-508	Voice General Use	772.162500	802.162500
	549-552	Voice General Use	772.437500	802.437500
	629-632	Voice General Use	772.937500	802.937500
	749-752	Voice General Use	773.687500	803.687500
	869-872	Voice General Use	774.437500	804.437500
	941-944	Voice General Use	774.887500	804.887500
	225-228	Voice State License	770.412500	800.412500
	313-316	Voice State License	770.962500	800.962500
	809-812	Voice State License	774.062500	804.062500
	885-888	Voice State License	774.537500	804.537500
Oconto	13-16	Voice General Use	769.087500	799.087500
	129-132	Voice General Use	769.812500	799.812500
	321-324	Voice General Use	771.012500	801.012500
	365-368	Voice General Use	771.287500	801.287500
	465-468	Voice General Use	771.912500	801.912500
	517-520	Voice General Use	772.237500	802.237500
	569-572	Voice General Use	772.562500	802.562500
	637-640	Voice General Use	772.987500	802.987500
	873-876	Voice General Use	774.462500	804.462500
	225-228	Voice State License	770.412500	800.412500
	273-276	Voice State License	770.712500	800.712500
Oneida	93-96	Voice General Use	769.587500	799.587500
	133-136	Voice General Use	769.837500	799.837500
	209-212	Voice General Use	770.312500	800.312500
	249-252	Voice General Use	770.562500	800.562500
	289-292	Voice General Use	770.812500	800.812500
	349-352	Voice General Use	771.187500	801.187500

	413-416	Voice General Use	771.587500	801.587500
	453-456	Voice General Use	771.837500	801.837500
	497-500	Voice General Use	772.112500	802.112500
	541-544	Voice General Use	772.387500	802.387500
	585-588	Voice General Use	772.662500	802.662500
	633-636	Voice General Use	772.962500	802.962500
	785-788	Voice General Use	773.912500	803.912500
	833-836	Voice General Use	774.212500	804.212500
	901-904	Voice General Use	774.637500	804.637500
	33-36	Voice State License	769.212500	799.212500
	153-156	Voice State License	769.962500	799.962500
	193-196	Voice State License	770.212500	800.212500
	305-308	Voice State License	770.912500	800.912500
	725-728	Voice State License	773.537500	803.537500
Outagamie	45-48	Voice General Use	769.287500	799.287500
	121-124	Voice General Use	769.762500	799.762500
	161-164	Voice General Use	770.012500	800.012500
	241-244	Voice General Use	770.512500	800.512500
	281-284	Voice General Use	770.762500	800.762500
	333-336	Voice General Use	771.087500	801.087500
	401-404	Voice General Use	771.512500	801.512500
	449-452	Voice General Use	771.812500	801.812500
	525-528	Voice General Use	772.287500	802.287500
	593-596	Voice General Use	772.712500	802.712500
	669-672	Voice General Use	773.187500	803.187500
	749-752	Voice General Use	773.687500	803.687500
	821-824	Voice General Use	774.137500	804.137500
	909-912	Voice General Use	774.687500	804.687500
	73-76	Voice State License	769.462500	799.462500
	193-196	Voice State License	770.212500	800.212500
	233-236	Voice State License	770.462500	800.462500
	685-688	Voice State License	773.287500	803.287500
	853-856	Voice State License	774.337500	804.337500
	925-928	Voice State License	774.787500	804.787500
Pepin	125-128	Voice General Use	769.787500	799.787500
	373-376	Voice General Use	771.337500	801.337500
	445-448	Voice General Use	771.787500	801.787500
	533-536	Voice General Use	772.337500	802.337500
	585-588	Voice General Use	772.662500	802.662500
	629-632	Voice General Use	772.937500	802.937500
	873-876	Voice General Use	774.462500	804.462500
	73-76	Voice State License	769.462500	799.462500
	685-688	Voice State License	773.287500	803.287500

Pierce	201-204	Voice General Use	770.262500	800.262500
	289-292	Voice General Use	770.812500	800.812500
	329-332	Voice General Use	771.062500	801.062500
	401-404	Voice General Use	771.512500	801.512500
	481-484	Voice General Use	772.012500	802.012500
	553-556	Voice General Use	772.462500	802.462500
	829-832	Voice General Use	774.187500	804.187500
	29-32	Voice State License	769.187500	799.187500
	105-108	Voice State License	769.662500	799.662500
	729-732	Voice State License	773.562500	803.562500
Polk	349-352	Voice General Use	771.187500	801.187500
	393-396	Voice General Use	771.462500	801.462500
	513-516	Voice General Use	772.212500	802.212500
	557-560	Voice General Use	772.487500	802.487500
	613-616	Voice General Use	772.837500	802.837500
	709-712	Voice General Use	773.437500	803.437500
	797-800	Voice General Use	773.987500	803.987500
	917-920	Voice General Use	774.737500	804.737500
	145-148	Voice State License	769.912500	799.912500
	189-192	Voice State License	770.187500	800.187500
Portage	809-812	Voice State License	774.062500	804.062500
	49-52	Voice General Use	769.312500	799.312500
	125-128	Voice General Use	769.787500	799.787500
	209-212	Voice General Use	770.312500	800.312500
	257-260	Voice General Use	770.612500	800.612500
	321-324	Voice General Use	771.012500	801.012500
	369-372	Voice General Use	771.312500	801.312500
	445-448	Voice General Use	771.787500	801.787500
	497-500	Voice General Use	772.112500	802.112500
	553-556	Voice General Use	772.462500	802.462500
	617-620	Voice General Use	772.862500	802.862500
	665-668	Voice General Use	773.162500	803.162500
	861-864	Voice General Use	774.387500	804.387500
	65-68	Voice State License	769.412500	799.412500
	229-232	Voice State License	770.437500	800.437500
	309-312	Voice State License	770.937500	800.937500
	733-736	Voice State License	773.587500	803.587500
	773-776	Voice State License	773.837500	803.837500

Portage	49-52	Voice General Use	769.312500	799.312500
	125-128	Voice General Use	769.787500	799.787500
	209-212	Voice General Use	770.312500	800.312500
	257-260	Voice General Use	770.612500	800.612500
	321-324	Voice General Use	771.012500	801.012500
	369-372	Voice General Use	771.312500	801.312500
	445-448	Voice General Use	771.787500	801.787500
	497-500	Voice General Use	772.112500	802.112500
	553-556	Voice General Use	772.462500	802.462500
	617-620	Voice General Use	772.862500	802.862500
	665-668	Voice General Use	773.162500	803.162500
	861-864	Voice General Use	774.387500	804.387500
	65-68	Voice State License	769.412500	799.412500
	229-232	Voice State License	770.437500	800.437500
	309-312	Voice State License	770.937500	800.937500
	733-736	Voice State License	773.587500	803.587500
	773-776	Voice State License	773.837500	803.837500
Price	13-16	Voice General Use	769.087500	799.087500
	53-56	Voice General Use	769.337500	799.337500
	125-128	Voice General Use	769.787500	799.787500
	321-324	Voice General Use	771.012500	801.012500
	365-368	Voice General Use	771.287500	801.287500
	445-448	Voice General Use	771.787500	801.787500
	513-516	Voice General Use	772.212500	802.212500
	621-624	Voice General Use	772.887500	802.887500
	941-944	Voice General Use	774.887500	804.887500
	689-692	Voice State License	773.312500	803.312500
	773-776	Voice State License	773.837500	803.837500
Richland	813-816	Voice State License	774.087500	804.087500
	285-288	Voice General Use	770.787500	800.787500
	333-336	Voice General Use	771.087500	801.087500
	389-392	Voice General Use	771.437500	801.437500
	437-440	Voice General Use	771.737500	801.737500
	557-560	Voice General Use	772.487500	802.487500
	613-616	Voice General Use	772.837500	802.837500
	665-668	Voice General Use	773.162500	803.162500
	781-784	Voice General Use	773.887500	803.887500
	945-948	Voice General Use	774.912500	804.912500
	145-148	Voice State License	769.912500	799.912500
	645-648	Voice State License	773.037500	803.037500
Rusk	929-932	Voice State License	774.812500	804.812500
	81-84	Voice General Use	769.512500	799.512500
	165-168	Voice General Use	770.037500	800.037500

	357-360	Voice General Use	771.237500	801.237500
	401-404	Voice General Use	771.512500	801.512500
	461-464	Voice General Use	771.887500	801.887500
	505-508	Voice General Use	772.162500	802.162500
	637-640	Voice General Use	772.987500	802.987500
	705-708	Voice General Use	773.412500	803.412500
	905-908	Voice General Use	774.662500	804.662500
	73-76	Voice State License	769.462500	799.462500
	765-768	Voice State License	773.787500	803.787500
	885-888	Voice State License	774.537500	804.537500
	925-928	Voice State License	774.787500	804.787500
Sauk	125-128	Voice General Use	769.787500	799.787500
	169-172	Voice General Use	770.062500	800.062500
	217-220	Voice General Use	770.362500	800.362500
	357-360	Voice General Use	771.237500	801.237500
	405-408	Voice General Use	771.537500	801.537500
	485-488	Voice General Use	772.037500	802.037500
	533-536	Voice General Use	772.337500	802.337500
	573-576	Voice General Use	772.587500	802.587500
	637-640	Voice General Use	772.987500	802.987500
	677-680	Voice General Use	773.237500	803.237500
	821-824	Voice General Use	774.137500	804.137500
	861-864	Voice General Use	774.387500	804.387500
	65-68	Voice State License	769.412500	799.412500
	685-688	Voice State License	773.287500	803.287500
	733-736	Voice State License	773.587500	803.587500
	773-776	Voice State License	773.837500	803.837500
	853-856	Voice State License	774.337500	804.337500
Sawyer	201-204	Voice General Use	770.262500	800.262500
	333-336	Voice General Use	771.087500	801.087500
	389-392	Voice General Use	771.437500	801.437500
	429-432	Voice General Use	771.687500	801.687500
	485-488	Voice General Use	772.037500	802.037500
	565-568	Voice General Use	772.537500	802.537500
	673-676	Voice General Use	773.212500	803.212500
	749-752	Voice General Use	773.687500	803.687500
	829-832	Voice General Use	774.187500	804.187500
	873-876	Voice General Use	774.462500	804.462500
	265-268	Voice State License	770.662500	800.662500
	309-312	Voice State License	770.937500	800.937500
	805-808	Voice State License	774.037500	804.037500
	893-896	Voice State License	774.587500	804.587500
Shawano	89-92	Voice General Use	769.562500	799.562500

	177-180	Voice General Use	770.112500	800.112500
	381-384	Voice General Use	771.387500	801.387500
	421-424	Voice General Use	771.637500	801.637500
	509-512	Voice General Use	772.187500	802.187500
	561-564	Voice General Use	772.512500	802.512500
	605-608	Voice General Use	772.787500	802.787500
	741-744	Voice General Use	773.637500	803.637500
	829-832	Voice General Use	774.187500	804.187500
	29-32	Voice State License	769.187500	799.187500
	109-112	Voice State License	769.687500	799.687500
	813-816	Voice State License	774.087500	804.087500
Sheboygan	49-52	Voice General Use	769.312500	799.312500
	165-168	Voice General Use	770.037500	800.037500
	245-248	Voice General Use	770.537500	800.537500
	285-288	Voice General Use	770.787500	800.787500
	349-352	Voice General Use	771.187500	801.187500
	405-408	Voice General Use	771.537500	801.537500
	461-464	Voice General Use	771.887500	801.887500
	569-572	Voice General Use	772.562500	802.562500
	617-620	Voice General Use	772.862500	802.862500
	753-756	Voice General Use	773.712500	803.712500
	865-868	Voice General Use	774.412500	804.412500
	905-908	Voice General Use	774.662500	804.662500
	29-32	Voice State License	769.187500	799.187500
	649-652	Voice State License	773.062500	803.062500
	693-696	Voice State License	773.337500	803.337500
	889-892	Voice State License	774.562500	804.562500
St. Croix	129-132	Voice General Use	769.812500	799.812500
	321-324	Voice General Use	771.012500	801.012500
	377-380	Voice General Use	771.362500	801.362500
	453-456	Voice General Use	771.837500	801.837500
	521-524	Voice General Use	772.262500	802.262500
	581-584	Voice General Use	772.637500	802.637500
	633-636	Voice General Use	772.962500	802.962500
	789-792	Voice General Use	773.937500	803.937500
	869-872	Voice General Use	774.437500	804.437500
	909-912	Voice General Use	774.687500	804.687500
	69-72	Voice State License	769.437500	799.437500
	305-308	Voice State License	770.912500	800.912500
	769-772	Voice State License	773.812500	803.812500
Taylor	173-176	Voice General Use	770.087500	800.087500
	213-216	Voice General Use	770.337500	800.337500
	329-332	Voice General Use	771.062500	801.062500

	385-388	Voice General Use	771.412500	801.412500
	481-484	Voice General Use	772.012500	802.012500
	521-524	Voice General Use	772.262500	802.262500
	605-608	Voice General Use	772.787500	802.787500
	669-672	Voice General Use	773.187500	803.187500
	789-792	Voice General Use	773.937500	803.937500
	105-108	Voice State License	769.662500	799.662500
	273-276	Voice State License	770.712500	800.712500
	729-732	Voice State License	773.562500	803.562500
Trempealeau	81-84	Voice General Use	769.512500	799.512500
	169-172	Voice General Use	770.062500	800.062500
	297-300	Voice General Use	770.862500	800.862500
	389-392	Voice General Use	771.437500	801.437500
	457-460	Voice General Use	771.862500	801.862500
	509-512	Voice General Use	772.187500	802.187500
	597-600	Voice General Use	772.737500	802.737500
	637-640	Voice General Use	772.987500	802.987500
	865-868	Voice General Use	774.412500	804.412500
	25-28	Voice State License	769.162500	799.162500
	145-148	Voice State License	769.912500	799.912500
	309-312	Voice State License	770.937500	800.937500
	805-808	Voice State License	774.037500	804.037500
Vernon	85-88	Voice General Use	769.537500	799.537500
	161-164	Voice General Use	770.012500	800.012500
	253-256	Voice General Use	770.587500	800.587500
	293-296	Voice General Use	770.837500	800.837500
	341-344	Voice General Use	771.137500	801.137500
	397-400	Voice General Use	771.487500	801.487500
	477-480	Voice General Use	771.987500	801.987500
	541-544	Voice General Use	772.387500	802.387500
	593-596	Voice General Use	772.712500	802.712500
	701-704	Voice General Use	773.387500	803.387500
	901-904	Voice General Use	774.637500	804.637500
	33-36	Voice State License	769.212500	799.212500
	233-236	Voice State License	770.462500	800.462500
	305-308	Voice State License	770.912500	800.912500
Vilas	177-180	Voice General Use	770.112500	800.112500
	241-244	Voice General Use	770.512500	800.512500
	281-284	Voice General Use	770.762500	800.762500
	381-384	Voice General Use	771.387500	801.387500
	425-428	Voice General Use	771.662500	801.662500
	477-480	Voice General Use	771.987500	801.987500
	533-536	Voice General Use	772.337500	802.337500

	573-576	Voice General Use	772.587500	802.587500
	677-680	Voice General Use	773.237500	803.237500
	741-744	Voice General Use	773.637500	803.637500
	797-800	Voice General Use	773.987500	803.987500
	877-880	Voice General Use	774.487500	804.487500
	109-112	Voice State License	769.687500	799.687500
	653-656	Voice State License	773.087500	803.087500
	733-736	Voice State License	773.587500	803.587500
	853-856	Voice State License	774.337500	804.337500
Washburn	133-136	Voice General Use	769.837500	799.837500
	217-220	Voice General Use	770.362500	800.362500
	297-300	Voice General Use	770.862500	800.862500
	373-376	Voice General Use	771.337500	801.337500
	449-452	Voice General Use	771.812500	801.812500
	629-632	Voice General Use	772.937500	802.937500
	741-744	Voice General Use	773.637500	803.637500
	785-788	Voice General Use	773.912500	803.912500
	865-868	Voice General Use	774.412500	804.412500
	113-116	Voice State License	769.712500	799.712500
	685-688	Voice State License	773.287500	803.287500
	725-728	Voice State License	773.537500	803.537500
	845-848	Voice State License	774.287500	804.287500
Waupaca	169-172	Voice General Use	770.062500	800.062500
	349-352	Voice General Use	771.187500	801.187500
	437-440	Voice General Use	771.737500	801.737500
	477-480	Voice General Use	771.987500	801.987500
	541-544	Voice General Use	772.387500	802.387500
	585-588	Voice General Use	772.662500	802.662500
	633-636	Voice General Use	772.962500	802.962500
	789-792	Voice General Use	773.937500	803.937500
	901-904	Voice General Use	774.637500	804.637500
	941-944	Voice General Use	774.887500	804.887500
	153-156	Voice State License	769.962500	799.962500
	269-272	Voice State License	770.687500	800.687500
	725-728	Voice State License	773.537500	803.537500
Waushara	93-96	Voice General Use	769.587500	799.587500
	329-332	Voice General Use	771.062500	801.062500
	389-392	Voice General Use	771.437500	801.437500
	489-492	Voice General Use	772.062500	802.062500
	577-580	Voice General Use	772.612500	802.612500
	673-676	Voice General Use	773.212500	803.212500
	113-116	Voice State License	769.712500	799.712500
	689-692	Voice State License	773.312500	803.312500

Winnebago	81-84	Voice General Use	769.512500	799.512500
	213-216	Voice General Use	770.337500	800.337500
	253-256	Voice General Use	770.587500	800.587500
	297-300	Voice General Use	770.862500	800.862500
	341-344	Voice General Use	771.137500	801.137500
	413-416	Voice General Use	771.587500	801.587500
	469-472	Voice General Use	771.937500	801.937500
	565-568	Voice General Use	772.537500	802.537500
	609-612	Voice General Use	772.812500	802.812500
	661-664	Voice General Use	773.137500	803.137500
	701-704	Voice General Use	773.387500	803.387500
	781-784	Voice General Use	773.887500	803.887500
	869-872	Voice General Use	774.437500	804.437500
	25-28	Voice State License	769.162500	799.162500
	105-108	Voice State License	769.662500	799.662500
	645-648	Voice State License	773.037500	803.037500
	769-772	Voice State License	773.812500	803.812500
	809-812	Voice State License	774.062500	804.062500
	885-888	Voice State License	774.537500	804.537500

Wood	41-44	Voice General Use	769.262500	799.262500
	81-84	Voice General Use	769.512500	799.512500
	165-168	Voice General Use	770.037500	800.037500
	297-300	Voice General Use	770.862500	800.862500
	337-340	Voice General Use	771.112500	801.112500
	377-380	Voice General Use	771.362500	801.362500
	429-432	Voice General Use	771.687500	801.687500
	473-476	Voice General Use	771.962500	801.962500
	513-516	Voice General Use	772.212500	802.212500
	565-568	Voice General Use	772.537500	802.537500
	609-612	Voice General Use	772.812500	802.812500
	717-720	Voice General Use	773.487500	803.487500
	781-784	Voice General Use	773.887500	803.887500
	821-824	Voice General Use	774.137500	804.137500
	905-908	Voice General Use	774.662500	804.662500
	265-268	Voice State License	770.662500	800.662500
	645-648	Voice State License	773.037500	803.037500
	765-768	Voice State License	773.787500	803.787500
	853-856	Voice State License	774.337500	804.337500
	925-928	Voice State License	774.787500	804.787500

Appendix L: LIST OF COMMON ACRONYMS:

AASHTO	American Association of State Highway and Transportation Officials
AGL	Above Ground Level
ANSI	American National Standards Institute
APCO	Association of Public-Safety Communications Officials
BOC	Bureau of Communications - Wisconsin State Patrol
CAPRAD	Computer Assisted Pre-Coordination Resource
CTCSS	Continuous Tone Coded Squelch System
D/U	Desired to Undesired
dB	Decibel
dBu	Decibel per unit
DOC	Department Operations Center
DTV	Digital Television
ERP	Estimated Radiated Power
FCC	Federal Communications Commission
FCCA	Forestry Conservation Communications Association
FDMA	Frequency Division Multiple Access
GHz	Gigahertz
HAAT	Height Above Average Terrain
I/O	Input/Output
ICS	Incident Command System
IMSA	International Municipal Signal Association
kHz	kilohertz
LMR	Land Mobile Radio
MHz	Megahertz
MOU	Memorandum of Understanding
NAC	Network Access Code
NCC	National Coordination Committee
NENA	National Emergency Number Association
NIIMS	National Interagency Incident Management System
NIMS	National Incident Management System
NPSTC	National Public Safety Telecommunications Counsel
PSWAC	Public Safety Wireless Advisory Committee
RFP	Request for Proposal
RPC	Regional Planning Committee
SIEC	State Interoperability Executive Committee
TDMA	Time Division Multiple Access
TIA	Telecommunications Industry Association
TV	Television
TX	Transmit
WICORTS	Wisconsin Interoperability Committee on Radio and Tower Systems

Appendix M: ADJACENT REGION ORIGINAL PLAN CONCURRENCE:

August 6, 2005

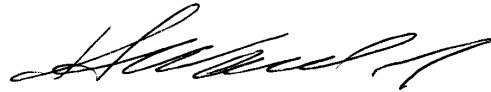
Regional Chairperson Region 45

**Dear Mr. Guse
POB 7912
4802 Sheboygan Ave Rm 551
Madison, WI 53707-7912**

Region 13 is in receipt of your proposed 700 MHz Regional Plan, submitted to this Committee. Region 13 met on 08/05/05, reviewed and formally approved Region 45's Plan.

This letter serves as the official, written concurrence of Region 13 to your proposed 700 MHz Regional Plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. Ward, Jr.", written in a cursive style.

**Mr. Thomas J. Ward, Jr.
Chairperson Region 13
531 Sangamon Avenue
Springfield, IL 62702**

March 15, 2006

Russell Schriener
Communications Engineer
Sheboygan Police Department
828 Center Ave.
Sheboygan, WI 53081
(920) 459 3351
rschriener@ci.sheboygan.wi.us

Dear Mr. Schriener:

The Region 15 (Iowa) 700 MHz Regional Planning Committee has reviewed your Final 700 MHz Regional Plan for Region 45. This letter is to formally notify you of our concurrence and approval of Region 45's Plan.

We have also signed an Inter-Regional Dispute Resolution Agreement to include with your Regional Plan when filed with the FCC. This Agreement simply formalizes the process we will use to ensure concurrence to any frequency allocations in our Regional borders and the steps we will take to resolve any disagreements.

Sincerely,


Richard H. Hester
Chair, Region 15
Iowa State Patrol Communications
56911 Whitepole Road
Lewis, IA 51544
PH: 712-769-2395
FX: 712 769-2475
Email: hester@iaps.state.ia.us



REGION 21 700 MHz PLANNING COMMITTEE

Joseph M. Turner, Chairman 2719 State Street
Saginaw, MI 48602 Tel 989 793-7373
e-mail: jturnen@michiganrpc.org

March 16, 2006

Reference: Letter of Concurrence for Regional Plan

Mr. Russell Schreiner, Chairman
Region 45 700 MHz RPC
Communications Engineering
City of Sheboygan Police Department
828 Center Ave.
Sheboygan, WI 53081

Dear Mr. Schreiner:

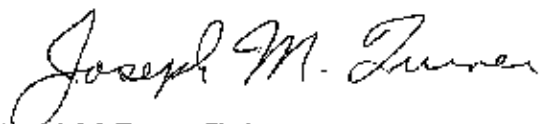
This letter is being sent as a formal confirmation of a decision by members of Michigan's 700 MHz Regional Planning Committee (Region 21 RPC) with regard to Region 45's request for concurrence on their plan.

At its public meeting of March 7, 2006 the RPC passed the following resolution:

"Be it Resolved that the Region 21 Committee concurs with the use of 700 MHz frequencies in the several regions bordering Region 21 as assigned in the original CAPRAD sort. In the event that a region bordering Region 21 intends to use a frequency(ies) other than those assigned in the original sort promulgated by the FCC, within an area extending 70 miles from the border of Region 21, the Region 21 Committee may ask for additional information including engineering studies, to determine any impact the proposed deviation from the original CAPRAD sort will have on the use of the 700 MHz spectrum within Region 21. Region 21 will grant concurrence upon a sufficient showing that the proposed changes from the CAPRAD sort will result in no interference to current or future users of the 700 MHz spectrum within Region 21."

Michigan's Region 21 RPC extends congratulations to our friends in Region 45 for the submission of their plan to the Federal Communications Commission. The Region 21 Planning Committee hopes the specific language of its Resolution of Concurrence will be sufficient for the needs of Region 45.

Yours truly, .

A handwritten signature in cursive script that reads "Joseph M. Turner". The signature is written in black ink and is positioned above the typed name and address.

Joseph M. Turner, Chairman
Region 21 700 MHz Planning Commission
2719 State St.
Saginaw, MI 48602

cc: FCC Jeannie Benfaida
Paul Wittkamp, Region 45 Secretary



Region 22 700 MHz Minnesota Planning Committee

Steve Pott, Chairman
Tele: 651-430-7601
steve.pott@co.washington.mn.us

Andrew Terry, Vice Chair
Tele: 651-296-7402
andy.terry@dot.state.mn.us

January 21, 2006

Karen A. Carlson
Communications Manager
Brown County Department of Public Safety Communications
Room 217
307 S. Adams Street
Green Bay, WI 54301-4582

Dear Ms. Carlson:

Region 22 received and reviewed your proposed 700 MHz Regional Plan. The Region 22 RPC met on October 12, 2004 and formally approved Region 46's Plan, subject to a 30 day comment window from its' members. That time passed with no comments.

This letter serves as the official, written concurrence of Region 22 to your proposed 700 MHz Regional Plan.

Sincerely,

Steve Pott, Region 22 Chair
Washington County Sheriff's Office
16016 62nd Street North
Stillwater, MN 55082-3801

An Equal Opportunity Employer



Region 54 700 MHz RPC

111 East Illinois Ave

Morris, IL 60450

815-405-0998 / 815-941-5718 fax

ckapire@grundys911.org

January 10, 2007

Chairperson Russell Schriener
Sheboygan Police Department
828 Center Ave
Sheboygan, WI 53081

Dear Mr. Schriener

Region 54 is in receipt of your proposed 700 MHz Regional Plan, submitted to this Committee on 10/11/06. Region 54 met on 1/10/2006, reviewed and formally approved Region 45's Plan.

This letter serves as the official, written concurrence of Region 54 to your proposed 700 MHz Regional Plan.

Sincerely,

Mr. William J. Carter
Chairperson Region 54
111 East Illinois Ave
Morris, IL 60450

Mr. Carl Guse
Vice Chairperson
Wisconsin State Patrol
4802 Sheboygan Ave
P.O. Box 7912
Madison, WI 53707

Appendix N: ADJACENT REGION SECOND R & O CONCURRENCE:

A CERTIFICATION BY ADJACENT REGIONS THAT MODIFICATIONS AND AMENDMENTS TO THE REGION 45 700 MHz PLAN TO MEET THE FEDERAL COMMUNICATIONS COMMISSION SECOND REPORT AND ORDER DEALING WITH THE COMMERCIAL BROADBAND 700 MHz FREQUENCY RE-ALIGNMENT PLAN HAVE BEEN REVIEWED AND AGREED TO

Region 13 has reviewed and approved the latest modifications to the Region 45 700 MHz plan. These changes include:

All references to the former wideband frequency ranges of 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted from the plan.


These references have been replaced with the new consolidated narrowband band plan between 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

Former data channels in TABLE THREE have been deleted.

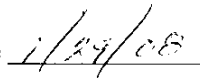
New channel names have been inserted where appropriate to replace the former channel names.

Section 8.2 has been added to address SPECTRUM REQUESTS FOR WIDEBAND OPERATIONS.

Signed



Date



Gary J. Cochran,
Region 13 Chairperson

A CERTIFICATION BY ADJACENT REGIONS THAT MODIFICATIONS AND AMENDMENTS TO THE REGION 45 700 MHz PLAN TO MEET THE FEDERAL COMMUNICATIONS COMMISSION SECOND REPORT AND ORDER DEALING WITH THE COMMERCIAL BROADBAND 700 MHz FREQUENCY RE-ALIGNMENT PLAN HAVE BEEN REVIEWED AND AGREED TO

Region 15 has reviewed and approved the latest modifications to the Region 45 700 Mhz plan. These changes include:

All references to the former wideband frequency ranges of 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted from the plan.

These references have been replaced with the new consolidated narrowband band plan between 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

Former data channels in TABLE THREE have been deleted.

New channel names have been inserted where appropriate to replace the former channel names.

Section 8.2 has been added to address SPECTRUM REQUESTS FOR WIDEBAND OPERATIONS.

Signed Richard H. Hester Date 01-03-2008

Richard Hester,
Region 15 Chairperson

A CERTIFICATION BY ADJACENT REGIONS THAT MODIFICATIONS AND AMENDMENTS TO THE REGION 45 700 MHz PLAN TO MEET THE FEDERAL COMMUNICATIONS COMMISSION SECOND REPORT AND ORDER DEALING WITH THE COMMERCIAL BROADBAND 700 MHz FREQUENCY RE-ALIGNMENT PLAN HAVE BEEN REVIEWED AND AGREED TO

Region 21 has reviewed and approved the latest modifications to the Region 45 700 Mhz plan. These changes include:

All references to the former wideband frequency ranges of 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted from the plan.

These references have been replaced with the new consolidated narrowband band plan between 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

Former data channels in TABLE THREE have been deleted.

New channel names have been inserted where appropriate to replace the former channel names.

Section 8.2 has been added to address SPECTRUM REQUESTS FOR WIDEBANDDD OPERATIONS.

Signed



Date December 20, 2007

Joseph M. Turner,
Region 21 Chairperson

A CERTIFICATION BY ADJACENT REGIONS THAT MODIFICATIONS AND AMENDMENTS TO THE REGION 45 700 MHz PLAN TO MEET THE FEDERAL COMMUNICATIONS COMMISSION SECOND REPORT AND ORDER DEALING WITH THE COMMERCIAL BROADBAND 700 MHz FREQUENCY RE-ALIGNMENT PLAN HAVE BEEN REVIEWED AND AGREED TO

Region 22 has reviewed and approved the latest modifications to the Region 45 700 MHz plan. These changes include:

All references to the former wideband frequency ranges of 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted from the plan.

These references have been replaced with the new consolidated narrowband band plan between 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

Former data channels in TABLE THREE have been deleted.

New channel names have been inserted where appropriate to replace the former channel names.

Section 8.2 has been added to address SPECTRUM REQUESTS FOR WIDEBAND OPERATIONS.

Signed  Date 1/30/08

Steve Pott,
Region 22 Chairperson

A CERTIFICATION BY ADJACENT REGIONS THAT MODIFICATIONS AND AMENDMENTS TO THE REGION 45 700 MHz PLAN TO MEET THE FEDERAL COMMUNICATIONS COMMISSION SECOND REPORT AND ORDER DEALING WITH THE COMMERCIAL BROADBAND 700 MHz FREQUENCY RE-ALIGNMENT PLAN HAVE BEEN REVIEWED AND AGREED TO

Region 54 has reviewed and approved the latest modifications to the Region 45 700 Mhz plan. These changes include:

All references to the former wideband frequency ranges of 767 MHz to 773 MHz, and 797 MHz to 803 MHz have been deleted from the plan.

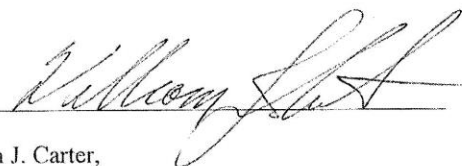
These references have been replaced with the new consolidated narrowband band plan between 769 MHz to 775 MHz, and 799 MHz to 805 MHz.

Former data channels in TABLE THREE have been deleted.

New channel names have been inserted where appropriate to replace the former channel names.

Section 8.2 has been added to address SPECTRUM REQUESTS FOR WIDEBANDD OPERATIONS.

Signed



Date

12-19-07

William J. Carter,
Region 54 Chairperson

Appendix O: AMENDMENT OF THE REGION 45 700 MHZ PLAN:

Region 45 Wisconsin 700 MHz Plan Amendments

APPENDIX O: Amendment of the Region 45 700 MHz Public Safety Plan for General Use spectrum in the 769 - 775 MHz / 799 - 805 MHz band.

Regarding the FCC Commission release of the narrowband reserve channels (twenty four 12.5 kHz channels) for General Use under the administration of the RPCs for the benefit of state and local public safety users.

The Commission released the reserve channels for General Use under RPC administration with priority access given to T-Band incumbents.... The Commission stated, “RPCs have the flexibility to designate a mixture of General Use and temporary (deployable trunked infrastructure) channels in their Regional Plans.” To the best of our knowledge, no T-Band licensees are/were allocated in Region 45.

The Region 45 Plan Amendment changes the plan, including Sections seven and eight, to incorporate all of:

- The new general use channels (*i.e.* the former reserve channels)
- The channels recommended by NPSTC and the NRPC for deployable trunked systems
- Vehicular repeater systems.

Due to the complexities of spectrum management Region 45 will hold all re-allotted channels in the General Use Pool for re-allocation to be determined upon the request of public safety entities for these resources to meet the needs of the specific agency, jurisdiction, and county. Public Safety agencies requesting General Use channels will be granted on a first come first serve basis. If a conflict exists, priority based on the explanation in Section nine of the original Region 45 plan will be used.

FCC Channel Label	CAPRAD Label	Base Frequency	Mobile Frequency	Status
37-38	Gen Use-Deployed	769.231250	799.231250	Open for allocation
61-62	Gen Use-Deployed	769.381250	799.381250	Open for allocation
77-78	General Use	769.481250	799.481250	Open for allocation
117-118	Gen Use-Deployed	769.731250	799.731250	Open for allocation
141-142	Gen Use-Deployed	769.881250	799.881250	Open for allocation
157-158	General Use	769.981250	799.981250	Open for allocation
197-198	General Use	770.231250	800.231250	Open for allocation
221-222	General Use	770.381250	800.381250	Open for allocation
237-238	General Use	770.481250	800.481250	Open for allocation
277-278	General Use	770.731250	800.731250	Open for allocation

301-302	General Use	770.881250	800.881250	Open for allocation
317-318	General Use	770.981250	800.981250	Open for allocation
643-644	General Use	773.018750	803.018750	Open for allocation
683-684	General Use	773.268750	803.268750	Open for allocation
699-700	General Use	773.368750	803.368750	Open for allocation
723-724	General Use	773.518750	803.518750	Open for allocation
763-764	General Use	773.768750	803.768750	Open for allocation
779-780	General Use	773.868750	803.868750	Open for allocation
803-804	General Use	774.018750	804.018750	Open for allocation
843-844	General Use	774.268750	804.268750	Open for allocation
859-860	General Use	774.368750	804.368750	Open for allocation
883-884	Gen Use-Deployed	774.518750	804.518750	Open for allocation
923-924	General Use	774.768750	804.768750	Open for allocation
939-940	Gen Use-Deployed	774.868750	804.868750	Open for allocation

This list of channels will be held in the General Use Pool for repurposing when and where needed by public safety agencies. The General Use Pool channels will provide optimal flexibility to meet unanticipated public safety spectrum requirements throughout Region 45. This will allow the Region 45 RPC to allocate the new channels through coordination without committing down valuable resources.

**Appendix P: ADJACENT REGION GENERAL USE CHANNEL
REALLOCATION CONCURRENCE:**

**Regional Planning Committee
Region 45
Concurrence Signature Letter
Reallocation of 700 MHz General Use Channels**

March 30, 2017

Russell R. Schreiner
Chairman, Region 45 700MHz RPC
Communications & Electronics Technician
Sheboygan Police Department
1315 North 23rd Street
Sheboygan, WI 53081

Dear Mr. Schreiner,

Region 13 has reviewed the proposed changes to the Region 45 700 MHz Regional Plan. Region 13 has also reviewed the Region 45 proposed allotments of the former reserve frequencies, now allocated for general use.

This letter, with my signature, serves as the official written concurrence for the Region 45 proposed 700 MHz Regional Plan amendment and changes.

Sincerely,

William Carter

William Carter
Chair Region 13 Illinois

**Regional Planning Committee
Region 45
Concurrence Signature Letter
Reallocation of 700 MHz General Use Channels**

Tuesday, February 14, 2017

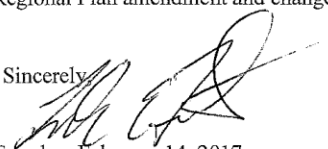
Russell R. Schreiner
Chairman, Region 45 700MHz RPC
Communications & Electronics Technician
Sheboygan Police Department
1315 North 23rd Street
Sheboygan, WI 53081

Dear Mr. Schreiner,

Region 15 State of Iowa has reviewed the proposed changes to the Region 45 700 MHz Regional Plan. Region 15 has also reviewed the Region 45 proposed allotments of the former reserve frequencies, now allocated for general use.

This letter, with my signature, serves as the official written concurrence for the Region 45 proposed 700 MHz Regional Plan amendment and changes.

Sincerely,


Tuesday, February 14, 2017
Region 15 Chair
Mr. Leslie E. Fish
5912 NW 2ND ST.
DES MOINES, IA 50313-1307

**Regional Planning Committee
Region 45
Concurrence Signature Letter
Reallocation of 700 MHz General Use Channels**

3/17, 2017
Month, Day

Keith M. Bradshaw
Chairperson, Region 21
Michigan Public Safety Communications
42145 West Seven Mile Road
Northville, MI 48167

Dear Mr. Schreiner,

Region 21 (^{MI} State) has reviewed the proposed changes to the Region 45 700 MHz Regional Plan. Region 21 has also reviewed the Region 45 proposed allotments of the former reserve frequencies, now allocated for general use.

This letter, with my signature, serves as the official written concurrence for the Region 45 proposed 700 MHz Regional Plan amendment and changes.

Sincerely,

(Signature, Title, ETC.)

Keith M. Bradshaw, Chairman
Michigan Public Safety Frequency
Advisory Committee

**Regional Planning Committee
Region 45
Concurrence Signature Letter
Reallocation of 700 MHz General Use Channels**

3, 7, 2017
Month, Day

James Mohn
Chairperson, Region 22
1500 W. CR B2
Roseville, MN 55113

Dear Mr. Schreiner,

Region 22 (Minnesota) has reviewed the proposed changes to the Region 45 700 MHz Regional Plan. Region 22 has also reviewed the Region 45 proposed allotments of the former reserve frequencies, now allocated for general use.

This letter, with my signature, serves as the official written concurrence for the Region 45 proposed 700 MHz Regional Plan amendment and changes.

Sincerely,



James Mohn
Chairperson
700 MHz RPC Region 22

**Regional Planning Committee
Region 45
Concurrence Signature Letter
Reallocation of 700 MHz General Use Channels**

April 14, 2017

Chris Kindelspire
Chairperson, Region 54 RPC
Grundy County ETSB (911)
78 W. Lowery Road
Morris, IL 60450

Dear Mr. Schreiner,

Region 54 (IL/IN/MI/WI) has reviewed the proposed changes to the Region 45 700 MHz Regional Plan. Region 54 has also reviewed the Region 45 proposed allotments of the former reserve frequencies, now allocated for general use.

This letter, with my signature, serves as the official written concurrence for the Region 45 proposed 700 MHz Regional Plan amendment and changes.

Sincerely,



Chris Kindelspire
R54 Chair
Grundy County 911